

For Reference

NOT TO BE TAKEN FROM THIS ROOM

For Reference

NOT TO BE TAKEN FROM THIS ROOM

Ex libris
UNIVERSITATIS
ALBERTAENSIS



THE UNIVERSITY OF ALBERTA

SEX-ROLE LEARNING OF GRADE ONE STUDENTS

BY

DONALD ALBERT KINLEY

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES
IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE
OF MASTER OF EDUCATION

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY

EDMONTON, ALBERTA

AUGUST, 1966

THE JOURNAL OF THE

AMERICAN MEDICAL ASSOCIATION

Vol. 40, No. 1

January 1925

Published Weekly, except on Sundays, and on the 1st of each month

Subscription price, \$5.00 per annum in advance

Single copies, 15 cents

Published by the American Medical Association

535 North Dearborn Street, Chicago, Ill.

Entered as Second-Class Matter, May 2, 1902

UNIVERSITY OF ALBERTA
FACULTY OF GRADUATE STUDIES

The undersigned certify that they have read,
and recommend to the Faculty of Graduate Studies for
acceptance, a thesis entitled "Sex-Role Learning of
Grade One Students" submitted by Donald Albert Kinley
in partial fulfilment of the requirements for the
degree of Master of Education.

ABSTRACT

This thesis was designed to investigate sex and socioeconomic status differences in four areas of sex-role learning. The dependent variables and measurement procedures were respectively as follows: (1) sex-role preference as indicated by (a) the It Scale for Children (Brown, 1956) and (b) doll play interrogation with respect to the preferred sex-role; (2) sex-role identification, as evidenced by the Draw-A-Person Test (Machover, 1949) scored on the basis of (a) sex of the first drawn figure, (b) sex of the larger drawn figure, and (c) sexual differentiation between the two human figures; (3) children's perceptions of parental preferences for sex-role adoption, as indicated by a modification of the Toy Preference Test (DeLucia, 1963); and (4) children's preferences for masculine or feminine playmates, as revealed by doll play interrogation.

Since the instruments available for use in this area of personality development have received little research attention, the construct and concurrent validity of the above tests was of additional concern. The interrelatedness of the four dependent variables was also investigated.

The sample comprised one hundred Grade One students: twenty-five boys and twenty-five girls of lower socioeconomic status, and twenty-five boys and twenty-five girls of upper-middle socioeconomic status. During a private session with each subject, the above instruments were administered.

The more important findings from the analyses may be

summarized as follows:

1. On the It Scale for Children, the children of both sexes scored masculine in sex-role preference, but this tendency was stronger for boys. When interrogated with respect to the preferred sex-role, all children responded with a like-sexed preference.

2. The girls' sex-role identifications were feminine, while those of boys were masculine. On the basis of the sex of the larger drawn figure, larger numbers of boys than girls evidenced identification with the appropriate sex role.

3. Both the boys and the girls perceived their parents as preferring appropriate sex-role adoption, but this tendency was stronger for the boys.

4. Preference for like-sexed playmates was characteristic of the boys, but not of the girls.

5. None of the instruments differentiated between lower and upper-middle socioeconomic status girls. In the case of boys, differences were all in the direction of earlier masculine sex-role learning by those of upper-middle socioeconomic status.

6. The two criteria of sex-role preference were uncorrelated, as were the three indicators of sex-role identification. The number of relationships among the dependent variables was not much greater than would be expected by chance.

It was suggested that the emphasis in further sex-role learning research should be placed upon the validation of measurement procedures.

ACKNOWLEDGEMENTS

The writer wishes to acknowledge his indebtedness to the many people whose co-operation and assistance contributed to the completion of this thesis.

Recognition is due, in particular, to Dr. J. MacDonald for his helpful criticisms and encouragement and to the other members of the committee, Dr. J. D. Ayers, Dr. W. B. Dockrell, and Dr. B. Schwartz for their advice and suggestions.

Appreciation is also expressed to the principals, Grade One teachers, and students of the co-operating schools.

Finally, thanks are due to Mrs. Wanda Wahlstrom for her capable assistance in the administration of tests to the male subjects.

THE FIRST PART OF THE HISTORY OF THE REIGN OF HENRY THE SEVENTH

THE FIRST PART OF THE HISTORY OF THE REIGN OF HENRY THE SEVENTH

THE FIRST PART OF THE HISTORY OF THE REIGN OF HENRY THE SEVENTH

THE FIRST PART OF THE HISTORY OF THE REIGN OF HENRY THE SEVENTH

THE FIRST PART OF THE HISTORY OF THE REIGN OF HENRY THE SEVENTH

THE FIRST PART OF THE HISTORY OF THE REIGN OF HENRY THE SEVENTH

THE FIRST PART OF THE HISTORY OF THE REIGN OF HENRY THE SEVENTH

THE FIRST PART OF THE HISTORY OF THE REIGN OF HENRY THE SEVENTH

THE FIRST PART OF THE HISTORY OF THE REIGN OF HENRY THE SEVENTH

THE FIRST PART OF THE HISTORY OF THE REIGN OF HENRY THE SEVENTH

THE FIRST PART OF THE HISTORY OF THE REIGN OF HENRY THE SEVENTH

THE FIRST PART OF THE HISTORY OF THE REIGN OF HENRY THE SEVENTH

THE FIRST PART OF THE HISTORY OF THE REIGN OF HENRY THE SEVENTH

THE FIRST PART OF THE HISTORY OF THE REIGN OF HENRY THE SEVENTH

THE FIRST PART OF THE HISTORY OF THE REIGN OF HENRY THE SEVENTH

THE FIRST PART OF THE HISTORY OF THE REIGN OF HENRY THE SEVENTH

THE FIRST PART OF THE HISTORY OF THE REIGN OF HENRY THE SEVENTH

TABLE OF CONTENTS

CHAPTER	PAGE
I. THE PROBLEM	1
II. REVIEW OF RELATED LITERATURE	9
Terminology	9
Parental Identification	12
Sex Typing	21
Sex-Role Preference	27
Sex-Role Identification	35
Choice of Playmates	41
Socioeconomic Status Differences in Sex- Role Learning	43
III. DERIVATION AND STATEMENT OF HYPOTHESES .	47
Sex-Role Preference	48
Sex-Role Preference as Indicated by the It Scale for Children	49
Operational Definitions	49
Statement of Hypotheses	50
Sex-Role Preference as Indicated by Doll Play Interrogation	51
Operational Definitions	51
Statement of Hypotheses	51
Relationships Between the Two Criteria of Sex-Role Preference	52
Statement of Hypotheses	52

CHAPTER

PAGE

Sex-Role Identification	53
Operational Definitions	54
Statement of Hypotheses	54
Relationships Among the Three Criteria of Sex-Role Identification	55
Statement of Hypotheses	56
Children's Perceptions of Parental Preferences for Sex-Role Adoption	56
Operational Definitions	57
Statement of Hypotheses	58
Choice of Playmates	59
Operational Definitions	59
Statement of Hypotheses	59
Relationships Among the Various Criteria of Sex-Role Learning	60
Statement of Hypotheses	61
IV. RESEARCH DESIGN	62
The Sample.	62
Sampling Criteria	62
Age and Grade	62
Socioeconomic Status of the Family	62
Intelligence	65
Broken Homes	68
Ethnic Background of the Parents	68

CHAPTER

PAGE

Family Size, Birth-Order, and	
Siblings	68
Sample Selection	70
Description of Instruments, Administration,	
and Scoring Procedures	71
Sex-Role Preference	71
The It Scale for Children	71
Doll Play Interrogation	74
Sex-Role Identification	74
The Draw-A-Person Test	74
Children's Perceptions of Parental	
Preferences for Sex-Role Adoption	76
The Toy Preference Test	76
Choice of Playmates	78
Testing Procedure	79
The Statistical Analysis	80
V. ANALYSIS AND RESULTS	81
Sex-Role Preference as Indicated by	
the It Scale for Children	81
Sex-Role Preference as Indicated by	
the Doll Play Interrogation	87
Relationships Between the Two Criteria	
of Sex-Role Preference	88
Discussion of "Sex-Role Preference"	
Findings	89

CHAPTER

PAGE

Sex-Role Preference as Indicated by the It Scale for Children	89
Sex-Role Preference as Indicated by Doll Play Interrogation	90
Relationship Between the Two Criteria of Sex-Role Preference	91
Sex-Role Identification	93
Relationships Among the Three Criteria of Sex-Role Identification	97
Discussion of the "Sex-Role Identification" Findings	98
Children's Perceptions of Parental Prefer- ences for Sex-Role Adoption	100
Discussions of Findings for "Children's Perceptions of Parental Preferences for Sex-Role Adoption"	105
Choice of Playmates	107
Discussion of "Choice of Playmates" Findings	110
Relationships Among the Various Criteria of Sex-Role Learning	111
Discussion of "Relationships Among the Various Criteria of Sex-Role Learning"	114

CHAPTER	PAGE
Intelligence as a Variable in Sex-Role Learning	116
VI. SUMMARY, CONCLUSIONS, AND IMPLICATIONS	119
Summary and Conclusions	119
Sex Differences	120
Socioeconomic Status Differences	122
Relationships Among the Criteria of Sex-Role Learning	125
Implications	126
BIBLIOGRAPHY	128
APPENDICES	136

LIST OF TABLES

TABLE		PAGE
I.	Age Means, Standard Deviations, and Ranges in Months for the Sample by Sex, by SES, and by Sex and SES	63
II.	Distribution of Occupations on the Canadian Occupational Scale for Fathers of the Sample of Children by Sex and SES	66
III.	Detroit Beginning First Grade Intelligence Test (Revised Form A) Deviation I.Q. Means, Standard Deviations, and Ranges for the Sample by Sex, by SES, and by Sex and SES.	67
IV.	Means, Standard Deviations, and Ranges of Family Size for the Sample by Sex, by SES, and by Sex and SES	69
V.	Frequency Distributions of ITSC Scores for the Sample by Sex, and by Sex and SES	82
VI.	Medians, Means, and Standard Deviations of ITSC Scores for the Sample by Sex, by SES, and by Sex and SES	83
VII.	Percentages of the Sample by Sex, by SES, and by Sex and SES Drawing the Same-Sexed Figure First, Drawing the Same-Sexed Figure Larger,	

TABLE	PAGE
VII. and Sexually Differentiating Between the Male and Female Figures on the Draw-A- Person Test	95
VIII. Frequency Distributions of Toy Preference Test Scores for the Sample by Sex and SES	101
IX. Means and Standard Deviations of Toy Prefer- ence Test Scores for the Sample by Sex, by SES, and by Sex and SES	102
X. Preferences of Subjects for Like-Sexed and Opposite-Sexed Playmates by Sex, by SES, and by Sex and SES	108
XI. Correlations Among the Three Tests of Sex- Role Identification: Correlations Between the Two Tests of Sex-Role Preference; and Correlations Among the Tests of Sex-Role Identification, Sex-Role Preference, Choice of Playmates, and Children's Perceptions of Parental Preferences for Sex-Role Adoption for Lower SES Boys and Upper-Middle SES Boys	112

TABLE

PAGE

XII.	Correlations Among the Three Tests of Sex- Role Identification; Correlations Between the Two Tests of Sex-Role Preference; and Correlations Among the Tests of Sex-Role Identification, Sex-Role Preference, Choice of Playmates, and Children's perceptions of Parental Preferences for Sex-Role Adoption for Lower SES Girls and Upper-Middle SES Girls	113
XIII.	Correlations of Detroit Deviation I.Q.'s with Sex-Role Learning Variables for Lower SES Boys, Lower SES Girls, Upper-Middle SES Boys, and Upper-Middle SES Girls . . .	117

CHAPTER I

THE PROBLEM

In the course of socialization a child is expected to learn and enact a progressive number of social roles. One of the most important of these for normal social development is the sex role, representing socially-defined behavior suitable to the child's position as male or female (Brown, 1958). When sex-role learning proceeds in the usual manner, the child achieves an appropriate sex-role identification during early childhood. Subsequently, diverse reactions characteristic of the appropriate sex role are unconscious and no longer deliberate or imitative. In more comprehensive terms, the establishment of masculine sex-role identification by a boy signifies the following:

The boy who has made a male identification is the boy who has happily and thoroughly adopted maleness as his way of life; he thinks of himself as male; he accepts and likes this state of affairs, its advantages and disadvantages; and he assumes the responsibilities that being male demands. His fantasy behavior is male, just as his sexual behavior, patterns of interest, and style of walking, talking and gesturing are male. (McCandless, 1961, p. 338)

Feminine sex-role identification of a girl could be defined by substituting girl for boy, mother for father, and feminine for masculine pronouns in the preceding quotation.

Appropriate sex-role identification is a crucial outcome of the enculturation of the child. In the words of Mowrer,

Personal normality presupposes that an individual has assimilated not only those values and ideals which are regarded as necessary and proper for all persons, but also those values and ideals which are uniquely appropriate to one's sex role as a man or as a woman. (Mowrer, 1950, p. 615)

Failure to establish appropriate sex-role identification is associated with a variety of socially-objectionable consequences in adulthood. Included are schizophrenia, homosexuality, impotence, frigidity, and unhappy marriage (McCandless, 1961). Conflicts stemming from incongruities between one's anatomy and one's tendencies toward opposite sex identification, and from the expectations of society and one's inadequate same-sex identification may be the basis of such psychological disturbances. The effects, however, may be cyclical since parents often repeat the inadequate parental performances they have observed as children.

Within a given society the sources of sex-role definitions are both biological and socio-cultural in nature. It is frequently proposed, however, that sex-role differentiations are primarily societal responses to biological sex differences in reproductive functions, hormone secretions, size, muscular power, and motor speed (Montagu, 1954). Although these physiological differences between

the sexes are culturally universal, many cross-cultural differences in behavior patterns are associated with the biological sex-dichotomy. Few psychological traits or occupational activities are culturally universal for males or females. In this respect anthropological studies indicate that different societies define masculine and feminine sex roles by utilizing the biological sex differences for diverse non-biological purposes. On this premise some theorists have concluded that masculinity and femininity are basically cultural and not biological (Mead, 1955; Frank, 1961). It has been noted, too, that sex differences in behavior in response to social definitions are as inef- faceable as those in response to constitutional differ- ences (Farber and Wilson, 1963).

Dramatic evidence of the crucial importance of social definitions in the realm of sex-role identification comes from medical research on infants born with genital abnormalities so that their sex is ambiguous. Frequently the sex initially assigned to them is biologically incorrect, but nevertheless, such children usually establish a gender role in conformity to the ascribed sex. Moreover, in instances where it is decided to reassign sex, severe psycho- logical problems may ensue (Clausen and Williams, 1963).

In American society it is popularly accepted that the psyches of men and women are also distinguished by charac- teristic qualities (Walker and Fletcher, 1955). Certain

mental and emotional attitudes and reactions are regarded as more appropriate to a man and others more suitable to a woman. Such public stereotypes of the psyches of males and females are accompanied by different sex-role expectancies covering much behavior. From their investigations, Sherriffs and Jarrett (1953) have concluded that "Virtually no behavior or quality escapes inclusion in either the male or female stereotype and these stereotypes are essentially the same whether held by men or women." (Sherriffs and Jarrett, 1953, p. 161)

Popular stereotyped views of the nature of masculinity and of femininity have been changing rapidly, however. Masculine and feminine roles have become broader, less rigidly defined, and less sex-typed (Brown, 1958). The recent redefinitions of masculinity and femininity have served to reduce self-consciousness about sex-roles and have provided more freedom of individual choice, for example, in terms of career. The following are examples of contemporary sex-role trends:

1. Most girls are now being educationally prepared for careers, although this is inconsistent with society's expectations that females will refrain from seeking self-realization through work and achievement (Bettelheim, 1963). Since the feminist movement of the 1930's, women have been more free to pursue careers, and the size and diversity of the female labor force has reflected this freedom. Of

recent origin, however, is the "feminist mystique." Friedan (1964) suggests that as a result of this "mystique" the homemaker role has been glamourized and it has been fashionable and prestigious for women to seek self-realization through marriage, child-rearing, and homemaking, rather than through careers. There is evidence, however, that a larger number of women are covertly dissatisfied with the homemaker role (Friedan, 1964). It is likely that this role conflict will be reflected in the sex-role learning of their offspring.

2. The balance of power within the family has been continually shifting with fathers yielding parental authority to mothers and taking on some of the nurturant and affectional functions traditionally associated with the maternal role (Bronfenbrenner, 1961). Fathers now perform many previously tabooed housekeeping and child-rearing tasks without self-consciousness.

3. Both masculine and feminine apparel have undergone recent changes. Some apparel for boys and men emphasizes color, softness, and delicate features; while some female apparel emphasizes traditionally masculine features (Brown, 1958).

To the extent that sex-role behavior is culturally defined, rather than constitutional in nature, the recent changes in societal definitions and parental manifestations, as exemplified above, will be reflected in the sex-role

learning of children. For this reason alone, current investigation of this area of child development would be warranted. However, further research on this topic need not be justified exclusively on the basis of contemporary trends. A decade ago Brown noted that sex-role behavior was "one of the least explored areas of personality formation and development" (Brown, 1956, p. 1). The research which has been undertaken is subject to the following limitations:

1. The focus of empirical research has been on isolated aspects of the sex-role learning process, for example, sex-typing, sex-role preference, sex-role identification, and parental identification. As a result there has been insufficient consideration of the interrelatedness of these processes. Hence, the reviewer must synthesize literature written from diverse theoretical frames of reference on these related topics.

2. A standard nomenclature for labelling the various aspects of sex-role learning is not evident in the literature. Rather, dissimilarities between theorists in conceptualizing the same behavioral phenomena necessitates that the reader consider the operational definitions of variables in determining which studies are of the same process. For example, the distinctions between sex-role preference, sex role adoption, and sex-role identification which are outlined in Chapter II are common to only a limited number of theorists.

3. Research conclusions lack consistency and in many instances are contradictory. Findings which deviate from the preponderance of existing evidence or a researcher's deductions from a specified theory, are often explained in terms of idiosyncracies of the particular sample under study or recent changes in sex-role trends, while more important sources of variability are overlooked. It is probable that differences between measurement procedures are one important source of divergence in experimental results. Although different techniques for measuring particular components of sex-role learning have been developed, for example, sex-role identification, concurrent validation of tests by correlational and factorial techniques is rare. Indeed, the usual validation procedure of establishing the communality of a new test with those already in use on some specified population is the exception. Rather, theorists who have developed sex-role measurement techniques have been satisfied with construct and content validation of their instruments. Consequently, there is little evidence to indicate whether different tests of specific aspects of sex-role learning measure similar underlying behavioral phenomena or not.

The limitations of existing research, listed above, provided guide-lines for planning this thesis investigation. More specifically, the concentration of previous

studies on separate aspects of the sex-role learning process indicated the need for a more comprehensive examination of this topic. Within such a study, a critical examination of measurement procedures themselves seemed imperative. Upon this rationale, attention was focussed on four dependent variables and their interrelatedness, namely, sex-role preference, sex-role identification, children's choices of masculine or feminine playmates, and children's perceptions of parental preferences for sex-role adoption.

CHAPTER II

REVIEW OF RELATED LITERATURE

TERMINOLOGY

Since the time of Freud the concept of identification has held a prominent position in psychology. It has not only been used in relation to a given sex role or to a parental role, but it has been used to indicate the feeling of belonging to a group, one's solidarity or involvement with the group, and one's incorporation of the group's values and attitudes (Lynn, 1961). As this term carries varied meanings, conceptual clarification is necessary. Identification must also be differentiated from other related concepts.

In this thesis attention is focussed upon only two facets of the concept of identification: sex-role identification and parental identification. In Chapter I the former of the two was defined as the actual incorporation of a given sex role and unconscious reactions characteristic of that role. Stoke (1950) in an attempt to clarify the meaning of the latter process, arrived at the following description: "A child gives its emotional allegiance to one of its parents and tries to duplicate in its own life the ideas, attitudes, and behavior of the parent with whom

he is identifying" (Stoke, 1950, p. 163). These two processes are closely related, since identification with the like-sexed parent is usually requisite to identification with the appropriate sex role. However, it is important to distinguish between these terms since there are notable exceptions to a consistent pattern. For example, many children are without like-sexed parent models. Also, in certain instances, parent models themselves may not be firmly identified with the appropriate sex role. Under these circumstances, identification with the like-sexed parent may lead to identification with the inappropriate sex role.

Parental identification, as here conceptualized, must also be differentiated from imitative learning. Bandura and Walters (1963) have noted that each encompasses the same behavioral phenomena, the tendency of a child to reproduce the actions, attitudes, and emotional responses exhibited by a model. However, the following distinctions have been made by other theorists:

1. Kolberg (1963) has pointed out that parental identification results in the learning of a total role, whereas imitation does not. Lazowick (1955), as well, notes that through identification a subject might exhibit behavior similar to the model without ever having had to learn each and every response pattern reflecting this

similarity. "Clinical experience clearly demonstrates that similarity of behavior, say, between father and son, is much broader than could be convincingly accounted for by the learning of specific behavioral tendencies" (Lazowick, 1955, p. 176).

2. A strong emotional tie to the model is necessary for parental identification, but not necessary for imitative learning (Kolberg, 1963).

3. Parental identification is a motivated disposition rather than an instrumental response, that is, it is maintained without obvious extrinsic or situational rewards (Kolberg, 1963). According to Kagan (1958) a child's perceived similarity to the model is itself rewarding.

4. Imitation usually connotes spatio-temporal proximity between the acts of the imitator and the model, whereas parental identification may occur when the model is absent, or when he is present in a situation but is not engaged in the same activity as the imitator (Emmerich, 1959a).

Delineation of three further concepts, sex-role preference, sex-role identification, and sex-role adoption, will help to clarify later discussion. Brown (1956) has emphasized the need to differentiate between sex-role identification and sex-role preference. The first term, defined more succinctly in Chapter I, refers to the behavior

associated with one sex or the other that the individual introjects and acquires as his own; whereas sex-role preference refers to the behavior associated with one sex or the other that the individual would like to adopt, or that he perceives as preferred or more desirable behavior (Brown, 1956). Sex-role adoption refers to the actual adoption of behavior characteristic of one sex or the other, not simply the desire to adopt such behavior (Lynn, 1961). In most instances it would be expected that individuals would identify with the appropriate sex role, prefer that sex role, and adopt behavior accordingly, that is, they would identify with what they prefer and adopt, and prefer and adopt that with which they identify. Under such circumstances, these three processes would tend to fuse into a single phenomenon. Consistency in sex-role preference, sex-role adoption and sex-role identification patterns may not always prevail, however. For example, the fact that a boy wears long hair does not necessarily mean that he is identified with the female role, even though he adopts a particular aspect characteristic of it.

PARENTAL IDENTIFICATION

Since there is much apparent disagreement between theorists with respect to the nature of parental identification, the motives involved, and the types of parent-child

relationships which facilitate this process, a review of representative theories is indicated.

Freud used the process of parental identification, "to mold one's ego after the fashion of one that has been taken for a model" (Freud, S., 1948, p. 63), to explain the development of the superego and the learning of sex-appropriate behavior. The psychoanalytic theory of parental identification can best be explained in terms of the growth and resolution of the Oedipus complex and the Electra complex, for boys and girls. With respect to the former, at about the age of three or four a boy recognizes that his father is a dangerous and powerful rival for his mother's affection. The danger arises from the real or fantasied threat of castration by his father, if his incestuous desire for the mother is discovered. The boy's discovery that girls have no penis, having apparently been castrated, indicates that the threat of castration is not an empty one. In view of this danger, it is wiser for the boy to repress his desire for the mother and share her love vicariously through identification with the father. In the process of identification, the boy observes, imitates, and incorporates into himself the attributes of his father. The more successful his identification with his father and repression of the incestuous desire for the mother, the less he has to fear.

The process of identification with the like-sexed

parent is more complex for girls than boys. The little girl at first has a mother fixation. However, early in childhood she notices the anatomical difference between males and females, and blames her mother for the absence of a penis (the castration complex). The girl then identifies with the father, and this preference continues until about the age of six. At this age she realizes that she cannot replace her mother, and if she continued her efforts to do so, she would jeopardize her relationship with her mother. As a result she represses her incestuous wishes for her father and incorporates her mother's image.

Although the psychoanalytic account of the process of parental identification differs for boys and girls, the motives are the same. Parental identification is a reaction to fear of the parents and the need for self-protection. It is a defence mechanism, and has been referred to as "defensive identification" (Mowrer, 1950) and "identification with the aggressor" (Freud, A., 1946).

Role-learning theorists (Mowrer, 1950; Stoke, 1950; Sears, Maccoby and Levin, 1957) conceptualize the parental identification of children as a normal type of social learning of the sex-role responses of their parents. The extent of identification is dependent upon the nature and intensity of parent-child interactions and emotional attachments. Sears et al. and Mowrer have postulated that

the feared loss of the parents' love is an important motive. In addition, Sears et al. have pointed out that the child's desire to reproduce parental actions which have been nurturant and supporting, a high level of dependency, and the use of love-oriented disciplinary techniques may be important in fostering identification. Stoke has considered numerous other factors as important determinants of parental identification. Included among these are the degree of parent-child acquaintance and contact, the clarity and consistency of the parents' role-modeling, the attitudes of influential persons toward the model, the social pressures upon the child to identify with his sex-role, the degree of affection accorded to the child by the model, and the like-sexed parent's expectation that the child will be like himself. Stoke does not indicate, however, the relative importance of these varied predisposing factors.

In certain respects the role-learning account of parental identification is in contrast to psychoanalytic theory. Role-learning theorists do not take the Oedipus situation into account. The motive for identification is not fear of the parents or the need for self-protection, but a strong positive emotional bond between the parent and the child. Unlike psychoanalytic theory, the literal incorporation of the image of the like-sexed parent is not assumed in role-learning theory. As a further point of

The present work is a continuation of the
author's previous work on the subject of
the history of the English language.
It is a study of the English language
from the point of view of its history
and development. The author has
traced the history of the English
language from its earliest forms
to the present day. He has shown
how the English language has
developed from its roots in
Old English to the modern
English of today. He has also
shown how the English language
has been influenced by other
languages, particularly Latin and
French. The author's study is
based on a careful examination
of the historical evidence, and
he has shown that the English
language is a living language,
one that is constantly changing
and developing. He has also
shown that the English language
is a language of great power
and influence, one that has
shaped the world as we know
it today. The author's study is
a valuable contribution to the
history of the English language,
and it is a book that every
student of the English language
should read.

contrast, psychoanalytic theory places the girl at a disadvantage in parental identification because of resentment of her inferior anatomy, whereas the role-learning position stresses that her greater amount of contact with the mother model, than the boy with the father model, provides an advantage. Other techniques for learning sex-appropriate behavior, for example, intentional sex-typing by parents, are relevant to the role-learning theoretical position, but are of little concern in psychoanalytic theory.

The social-power identification theory of Parsons and Bales (1955) is a logical extension of the psychoanalytic and role-learning theories. Parsons and Bales (1955) have postulated that parental identification is a response to the child's perception that parents are powerful in the sense of controlling and implementing both reward and punishment. For example, a boy may identify with his father, not solely because he is a kind model and not only because he is a threat, but because he is effective in both rewarding and punishing the boy. The former motive for identification is congruent with the role-learning position, while the latter is in keeping with the defensive hypothesis of psychoanalytic theory. According to Parsons' and Bale's theoretical formulation, the relative ease of parental identification for a child would be contingent upon the familial balance of parental power and the intensity of parent-child interactions.

The recent shifts in the balance of power within the family would have many implications for this theory.

Maccoby's (1959) account of the process of parental identification seems to be closely related to the social-power theory of Parsons and Bales (1955). Maccoby has explained the acquisition of sex-appropriate behavior in terms of "covert role practice," that is, through practising covertly the actions characteristic of the adults with whom the child interacts most frequently. The conditions which determine how thoroughly the actions of others with whom a child interacts will be incorporated into his behavior repertoire are as follows: the extent of parent-child interactions, the intimacy of the parent-child relationship, and the amount of control the parent exercises over resources needed by the child. With respect to the last condition, Maccoby states that a child will rehearse "both the rewarding and punishing actions characteristic of his parents, for both are highly relevant to him in guiding his plans for future actions" (Maccoby, 1959, p. 246). This antecedent of parental identification is comparable to the power motive of Parsons and Bales (1955).

The cognitive aspects of parental identification have been stressed by both Kagan (1958) and Lazowick (1955). Kagan (1958) defines parental identification as "an acquired cognitive response within a person (S). The content of this

response is that some of the attributes, motives, characteristics, and affective states of the model (M) are part of S's psychological organization" (Kagan, 1958, p. 298). Identification is motivated by the desire of the individual to experience the goal states of the model, one of the most important of which is environmental mastery. A subject may believe that if he were similar to the model, he too would command the model's desired goal states. Hence, the child assumes behavior similar to that of the model and continues his identification until the model's conduct is no longer perceived as desirable.

Lazowick (1955) states that if one takes the position that parental identification is learned, two questions need to be considered: what is learned and how is it learned? His answer to the first question is that meanings must be learned, because if a child learned only S-R connections he would behave as the model only in specific situations for which specific responses had been learned. Lazowick (1955) uses Osgood's mediation theory to answer the second question and defines parental identification as the relationship between sets of meanings of a subject (r_m^1 , subsets of behavior imitated from the model) and the model (r_m , the model's set of meanings). Lazowick proposes that through this process the child learns meanings from the model and these collectively make up his frame of reference. Similarity of behavior ensues from the common frame of reference.

Parental identification has been subjected to little research in childhood and the empirical findings are inconsistent. In Pauline S. Sears' (1953) study this process was operationally defined as the child's choice of the mother doll or the father doll for "non-aggressive behavior" during permissive doll play. The sample comprised 379 kindergarten boys and girls. It was found that the girls were more strongly identified with their mothers than with their fathers. The boys, however, were no more firmly identified with their fathers than with their mothers. Contrasting findings have been reported by both Emmerich (1959a) and Hartup (1962). Emmerich (1959a) devised a doll play procedure to assess the amount of similarity between the child's behavior and his conception of the same behavior by the parent, at an attitudinal level. The study was conducted with a small sample of nursery school children. Identification with the like-sexed parent was characteristic only of the boys. Hartup (1962) also used a doll play technique and the IT Scale for Children¹ with a sample of upper-middle socioeconomic status nursery school children. Although the children of both sexes were more strongly identified with the like sexed parent than the opposite-sexed parent, there

¹A projective test of sex-role preference which is referred to throughout this thesis and described in Chapter IV.

were no sex differences in this tendency. Feminine sex-role preference in girls was related to mother identification, but masculine sex-role preference in boys was found to be independent of father identification. This would indicate that like-sexed parental identification may be more important for girls than boys in the acquisition of appropriate sex-role preferences.

Both Brodbeck (1954) and McBride (1961) used a personality inventory approach to study the parental identifications of adolescent students. Although neither of these researchers carried out their analyses to show sex differences in the strength of like-sexed parental identification, some interesting age trends were reported.

Brodbeck (1954), who devised his study to relate to subjects' internalized standards of conduct to the relative influence of their mothers and fathers, found that fathers were a greater influence on boys' moral values than they were on those of girls. Mothers held equal amounts of influence on children of both sexes. McBride has reported that both mother identification and father identification of boys diminish during adolescence, while for girls father identification remains constant throughout adolescence while mother identification decreases.

Evidence from research carried out by Blum (1949), Beier and Ratzeburg (1953) and Gray and Klaus (1956) clearly

indicates, however, that like-sexed parental identification continues into adulthood. All of these researchers studied parental identification in young adults, but different techniques were employed. Blum used the Blacky test; Gray and Klaus administered the Allport-Vernon-Lindzey Study of Values to their subjects as well as their parents; and Beier and Ratzeburg employed the MMPI in studying perceived similarity to parents. In each instance results were significant in the direction of stronger mother than father identification in females, and stronger father than mother identification in males.

SEX TYPING

Children's sex-role learning is fostered by patterns of rewards and punishments administered by others. Adults and peers expect sex differences in boys' and girls' conduct and consciously and unconsciously exert pressures to encourage behavior which conforms to sex-role definitions. This nurturance of appropriate sex-role behavior by the various agents of socialization is termed sex-typing. Sex-typing has its beginning in infancy when children are identified by blue or pink blankets (Watson, 1961). Subsequently, this process continues in accordance with the cultural definitions of the patterns of conduct, privileges, and duties which are suitable to each sex. Many of the varied life activities are sexually-patterned. Children

must learn to speak using sex-appropriate posture, gesture, vocabulary, and tone of voice. Suitable attire and grooming for males and females are prescribed. Children are encouraged to conform in their emotional responses to the masculine and feminine stereotypes. For example, "A boy must keep a stiff upper lip, must never display his feelings and must appear indifferent to many things to which he is drawn" (Walker and Fletcher, 1955, p. 36). Socially, girls are expected to learn to display such feminine virtues as modesty, gentleness, timidity, and submissiveness; while those traits of a dominating character, which are suitable to men in a patriarchal society, are encouraged in boys.

Many specific examples of intentional parental sex-typing may be cited:

1. Sex-suitability criteria are important in parental selection of children's toys. These are often tools to encourage imitation of traditionally masculine or feminine activities, for example, cooking sets and construction sets.

2. Parents actively foster imitation by certain verbal expressions. The utterances, "Just like Mommy" and "Just like Daddy," are frequently used to encourage sex-appropriate behavior (Hartley, 1964).

3. Fathers may tend to engage in more mutual play activity with their sons than their daughters, while

mothers may play more with their daughters than their sons.

4. Negative reinforcement of sex-inappropriate behavior during elimination helps to emphasize kinship with one sex or the other. The observant little girl who wants to urinate from an erect position is told, "No, little girls don't do that. You must sit like Mommy. Only Daddies and boys stand" (Hartley, 1964, p. 6).

Since tomboyish behavior by a girl evokes less social censure than girlish behavior by a boy, it has been hypothesized (Hall and Keith, 1964; Brown, 1958) that girls are allowed more freedom and latitude than boys in their sex-role adoption, although paradoxically they are more restricted in many other areas of child-training. Brown (1958) has provided the following examples of the greater range in sex-role adoption allowed girls:

1. Females may wear shirts and trousers with little social disapproval, but males who wear feminine clothing do so at the risk of severe social censure.

2. Many girls are given traditionally masculine names, but few boys are given names which are customarily used for girls.

3. Girls are often permitted to play with traditionally masculine toys, but boys are strongly discouraged from playing with traditionally feminine toys.

Intentional parental sex-typing, directed toward

...and the ... of the ...

...the ... of the ...

...the ... of the ...

...the ... of the ...

...the ... of the ...

...the ... of the ...

...the ... of the ...

...the ... of the ...

...the ... of the ...

...the ... of the ...

...the ... of the ...

...the ... of the ...

...the ... of the ...

...the ... of the ...

...the ... of the ...

...the ... of the ...

...the ... of the ...

...the ... of the ...

...the ... of the ...

...the ... of the ...

...the ... of the ...

nurturing approved sex differences in children's behavior such as those exemplified above, was a subject of investigation in the pattern study of R. R. Sears et al. (1957). Questions concerning intentional sex-role training were asked the large sample of mothers of kindergarten children. Only about five per cent of the mothers indicated that they did not value expressions of "masculine" behavior by a boy or "feminine" behavior by a girl, and most mothers expected and consciously encouraged sex-appropriate behavior. Child rearing practices followed by the mothers of girls were compared to those of boys' mothers. Girls were more warmly treated in infancy. They received less physical punishment and more disciplining through love withdrawal than boys. The task of disciplining girls was primarily the mother's responsibility, but for boys the father more often played an active role when he was present. Boys were allowed more aggression in their dealings with other children, and they were encouraged to fight back more frequently than girls. Sex-typing was also evidenced in the nature of household tasks assigned to boys and girls.

In a closely related study, Goodenough (1957) investigated sexually-patterned differences in the behavior of nursery school children and the sex-role differentiations of their parents. The reported sex differences in children's behavior were interpreted as indicating that boys define

their sex roles more sharply than girls. Goodenough suggested that for boys masculinity implies opposition to femininity, but for girls femininity does not imply opposition to masculinity. It was found that parents of both sexes disapproved of manifestations of sex-inappropriate behavior by their children. Fathers, however, were more concerned than mothers with fostering sex-appropriate behavior, and in their child-rearing practices they stressed sex-typed differences more strongly than the mothers.

If girls are subjected to less parental pressure for appropriate sex-role adoption than boys, and femininity is less rigidly defined than masculinity, then it may be anticipated that this will be reflected in children's perceptions of parental preferences for sex-role adoption. Only one relevant study of this variable was available. Fauls and Smith (1956) found that their five-year-old subjects were clearly aware of sex-appropriate behavior. Furthermore, they perceived both of their parents as preferring appropriate sex-role adoption. Although the analysis was not carried out to show sex differences, the data seemed to provide no evidence to verify that boys perceive stronger parental sex-typing pressures than girls, nor to provide evidence to indicate that fathers exert stronger sex-typing pressures than mothers. The apparent lack of sex differences, however, may be explicable in terms of the limited sample size (thirty-eight) and the small number of test items (six activity pictures).

Accurate conceptualizations of what is expected of them as males and females facilitates children's appropriate sex-role adoption. Specific sex-typing practices are prominent sources of sex-role concepts, but equally important are children's perceptions of parental roles and the specific characteristics attributed to each sex. Notwithstanding the evidence indicating that sex-roles are becoming less distinctive, research results reveal that the contrast in parental roles is clearly perceived by children. Furthermore the perceptions by children of various ages are notably consistent. In his study of four- and five-year-old children, Emmerich (1959b) found that mothers were viewed as more nurturant and less dominating and interfering than fathers. Similar results were reported by Kagan (1956) for a sample of children aged six to ten. Mothers were perceived as more friendly, less dominant, less threatening, and less punitive than their fathers. In a subsequent study, Kagan (1960) investigated the differential perception of mothers and fathers with respect to power, punitiveness, nurturance, and competence in a sample of children ranging in age from three to nine. Both sexes perceived their fathers as more fear arousing, more competent, more punitive, and less nurturant than mothers.

Although children are clearly aware of appropriate sex-role activities at an early age, and sex-typing pressures

are powerful, such impediments as the following may restrict children's appropriate sex-role adoption, and subsequently their identification with the like-sexed role:

1. Parental interpretations of sex-role prescriptions may be at variance with those of significant others.

2. The attributes of masculinity and femininity are provided for children both conjunctively and disjunctively, that is, through positive and negative instances. When teaching is restricted to negative instances, the optimal in sex-role learning will not occur.

3. Sex-role concepts require constant reappraisal by children since there are age variants of sex-appropriate behavior. The societal definitions of sex-appropriate behavior are different for five-year-olds than for adults (Hartley, 1964). Although five-year-old children may conceptualize the adult sex-roles, societal expectations are that sex-role adoption will be restricted to age-suitable activities.

4. There are some individuals who are either physiologically or psychologically incapable of living up to all of the masculine or feminine requirements.

SEX-ROLE PREFERENCE

In an earlier section of this chapter sex-role preference was differentiated from sex-role identification, but it was stated that these variables were closely related in

that the usual pattern would be for an individual to prefer and identify with one sex role or the other. The point was also made that a consistent pattern need not always prevail, that is, an individual may manifest a preference for one sex role, but identify with the other. Before relevant research on the variable under discussion is reviewed, a theoretical basis for the existence of sex differences in the strength of appropriate sex-role preferences is presented.

Certain power and prestige characteristics of contemporary sex roles may discourage girls from preferring the female role although they may be identified with it. Various theorists (Komarovsky, 1953; Montagu, 1954; Brown, 1958; Lynn, 1961; Ellis, A., 1962; Ellis, H., 1962; Friedan, 1964; Adler, 1965) have described the socio-cultural privileges and advantages of being male in our patriarchal society. Moreover, children are aware of the inferiority and dependence of females in our society and view the father as wiser, stronger, and generally more competent than the mother (Kagan, 1956, 1960). This may arouse envy and make it difficult for a little girl to want to be female since femininity is synonymous with inferiority, submission, and dependence. The "masculine protest" of Adler (1965), that is manifested in girls by a masculine sex-role preference, may result. Insufficient or irregular encouragement of feminine tendencies in childhood (Brown, 1956),

discontentment of mothers with their sex-role (Friedan, 1964), and the similarities in school curriculum, vocational opportunities, names, toys, and attire for girls and boys (Brown, 1958) may also be of importance in fostering male sex-role preference in girls. Since they are aware of the greater male prestige and prerogatives in our society and receive much encouragement for masculine tendencies, boys may be expected to manifest appropriate sex-role preference.

From the preceding formulation, the hypothesis emerges that girls will show a greater trend toward masculine sex-role preference than boys toward feminine sex-role preference. Results of research with the It Scale for Children (hereafter sometimes referred to as ITSC) generally support this hypothesis. In his original study of children of ages five and six, Brown (1956) found significant differences between boys and girls in sex-role preference, suggesting a relatively dichotomous pattern. However, opposite sex-role preference was more common among girls than boys, and the preferences of boys for the masculine role were stronger than those of girls for the feminine role. Brown indicates that it was more characteristic of boys than girls to give "It" a name consistent with their sex, and those who did scored more masculine and more feminine, respectively, than those children who did not. No socioeconomic status differences were found, which Brown interprets as attributable to

the socioeconomic status homogeneity of the sample. In a subsequent study of 613 children ranging in school placement from kindergarten through the fifth grade, both boys and girls were characterized by masculine sex-role preference, this tendency increasing with age (Brown, 1957).

In a more recent study Hall and Keith (1964) used the ITSC to investigate sex and socioeconomic status differences in the sex-role preferences of children aged eight to ten. Their findings are comparable to those of Brown (1956,1957) in that boys evidenced more distinctly masculine sex-role preference than girls feminine sex-role preference. Hall and Keith reported socioeconomic status differences for boys, but not for girls. Boys of lower socioeconomic class were more masculine in sex-role preference than boys of upper socioeconomic status. All of the boys and the majority of the girls perceived "It" to be male. Girls who gave "It" a male name scored more masculine than those who gave "It" a female name.

Two studies by Clark (1963a, 1963b) are also relevant. In his first study, Clark (1963b) compared the ITSC sex-role preference scores of a sample of mentally retarded girls (mental ages five years, four months, to six years, four months) to those of Brown's (1956) sample of five-and six-year-olds. No significant differences were found between the two groups. Clark (1963b) reports similar results to

Brown (1956), in that a majority of retarded females perceived the "It" figure as male, and those girls who did scored less feminine than those who did not. No relationship was found between the ITSC scores and the sex of the first drawn figure on the Draw-A-Person Test¹ (Clark, 1963b). In a subsequent study of both male and female retardates, (Clark, 1963a) found that boys were characterized by more appropriate sex-role preferences than girls, on the basis of ITSC scores. He suggests that the absence of exclusively feminine sex-role preference patterns could be attributed to the high percentage of girls perceiving "It" as male. He did not indicate, however, if the children's perceptions of the sex of the "It" figure was related to the ITSC scores for either girls or boys.

Hartup and Zook (1960) and Lansky and McKay (1963) have dealt specifically with the effect on the ITSC scores of children's perceptions of the sex of the "It" figure. Hartup and Zook administered this instrument in the usual manner to a sample of three- and four-year-old children and found a dichotomous sex-role preference pattern. However, the boys scored more masculine than the girls, feminine.

¹A projective test used to study sex-role identification. This test is referred to later in this chapter, and described in detail in Chapter IV.

The readministration of this test to the same sample with the sex of "It" specified as the same sex as the subject, resulted in a change in girls' responses in the direction of femininity. No changes in the responses of boys were found, perhaps because most boys had perceived "It" as masculine during the first administration. Lansky and McKay (1963) administered the ITSC with the "It" concealed and found greater variability in scores of five-year-old boys than girls and a greater willingness on the part of boys to guess "It" as of the opposite sex. Scores of boys guessing "It" as male were more masculine than those who guessed "It" as female. The scores of girls guessing "It" as female, however, did not differ significantly from those who did not.

Brown (1962) has recognized the tendency of children of both sexes to view the "It" figure as male and the associated effects of this set upon their ITSC scores. He suggests that "It" may not lack sexual ambiguity as McCandless (1961) and Hall and Keith (1964) have speculated. Rather, in our traditionally masculine-oriented culture, any human figure not clearly structured as female will tend to be perceived as male, that is, a stick figure drawing is a "stick man," unless it is undisputably feminine. If the physical features of "It" were male it would be expected that equal proportions of boys and girls would perceive "It"

The following table shows the results of the analysis of variance for the effect of the treatment on the response variable. The results are presented in the form of a table with the following columns: Source of Variation, Sum of Squares, Degrees of Freedom, Mean Square, and F-value. The results are as follows:

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F-value
Treatment	12.5	2	6.25	1.5
Error	18.75	18	1.04	
Total	31.25	20		

The results show that the treatment has a significant effect on the response variable, as indicated by the F-value of 1.5, which is greater than the critical value of 1.04 at the 5% level of significance.

The following table shows the results of the analysis of variance for the effect of the treatment on the response variable. The results are presented in the form of a table with the following columns: Source of Variation, Sum of Squares, Degrees of Freedom, Mean Square, and F-value. The results are as follows:

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F-value
Treatment	12.5	2	6.25	1.5
Error	18.75	18	1.04	
Total	31.25	20		

The results show that the treatment has a significant effect on the response variable, as indicated by the F-value of 1.5, which is greater than the critical value of 1.04 at the 5% level of significance.

as such. This has not proven to be the case.

Other techniques have been used to measure sex-role preferences of children:

1. DeLucia (1963) has developed the Toy Preference Test, in her terms a measure of sex-role identification, but in this writer's frame of reference a measure of sex-role preference. In her study of children in kindergarten through the third grade, she reports an orderly age progression in appropriate sex-role "identification" for both sexes. At all ages, however, boys evidenced stronger "identification" with the masculine role than did girls with the feminine role. Hence, her results are congruent with the ITSC findings for boys, but not with the ITSC findings for girls.

2. Sex-role preference of working-class and middle-class children ranging in age from three to eight were studied by Rabban (1950) by means of their actual choices of traditionally masculine and feminine toys¹ in a play situation. He, too, found a developmental trend in sex-role preference. Boys, however, demonstrated a stronger preference for the masculine role than girls for the feminine role. Working-class children were characterized by a stronger appropriate sex-role preference pattern than

¹In Rabban's (1950) frame of reference this is a study of sex-role identification.

were middle class children.

3. Leftkowitz (1962) has standardized a group-administered games and activities inventory for the purpose of measuring sex-role preferences of school age children. Although not concerned with sex differences, he did find that appropriate sex-role preference was related to upper socioeconomic status rather than to lower socioeconomic status. A significant relationship between appropriate sex-role preference and appropriate sex-role identification, as indicated by the sex of the first drawn figure on the Draw-A-Person Test, was found for boys but not for girls.

4. A stereotyped appropriate sex-role preference pattern for both boys and girls has been found through direct questioning procedures. Kagan (1960) exposed a sample of children, ranging in age from three to eight, to a family picture and asked which parent they would rather be like when they were grown up. He found that all subjects responded with a like-sexed preference. In Rabban's (1950) study only two of sixty five-year-old children indicated that they wanted to be an opposite-sexed parent in adulthood. This stereotyped sex-role preference is also characteristic of older children. Leftkowitz (1962) found that only one per cent of Grade III and IV boys, and two per cent of girls in the same grades, expressed a desire to be an opposite-sexed parent.

When the data from the various cited studies of sex-role preference are considered, it is apparent that the results have been strongly dependent upon the measurement procedures used. The hypothesis of a greater trend toward masculine sex-role preference in girls than feminine sex-role preference in boys, is supported by the majority of studies based on the ITSC and those of DeLucia (1963) and Rabban (1950), who used other techniques. This hypothesis is not confirmed by children's responses to direct questions with respect to the preferred sex-role. A developmental trend in appropriate sex-role preference was revealed in two research studies (Rabban, 1950; DeLucia, 1963). Kagan's (1960) data, obtained through direct questioning of children, however, suggest that preferences are appropriately stereotyped by both sexes at age three. The lack of consensus in research results signifies that further attention needs to be directed toward the measurement of this variable. Inconsistencies in existing research strongly indicate that the various tests of sex-role preference assess different behavioral phenomena.

SEX-ROLE IDENTIFICATION

It has been noted that appropriate sex-role preference and appropriate sex-role adoption usually complement appropriate sex-role identification. The importance of

parental identification and sex-typing in evoking identification with the appropriate sex role also has been indicated previously. How these various aspects of sex-role learning may interact to contribute to sex differences in sex-role identification is now considered and pertinent empirical studies are reviewed.

Various theorists (Mowrer, 1950; Parsons and Bales, 1955; Emmerich, 1959a; Mussen and Distler, 1959; Lynn, 1962) have hypothesized that during infancy both boys and girls form an identification with their mothers since they are the most gratifying and affectionate persons in the environments of children. During childhood girls may continue to identify with their mothers, but boys must discontinue their mother identifications and establish identifications with their fathers. Lynn (1961) speculates that this shift may be difficult for many boys and that some may remain identified with their mothers. If boys do not change identification models they may be unable to profit from the elaborate rewards offered to males for establishing a masculine sex-role identification. Since mothers typically play a more significant role in child-rearing than fathers, and primary school teachers are almost exclusively feminine, during childhood boys must determine the attributes of masculine behavior in the context of a female-based environment. This lack of contact with their fathers in some instances

may necessitate that boys identify with the masculine stereotype rather than with their paternal models (Lynn, 1962). Frequently the concept of masculinity must be attained from negative rather than from positive instances, and boys are often punished for manifestations of sex-inappropriate behavior. Lynn (1964) reviews research indicating that divergent feedback and punishment are poor methods of inducing sex-role learning. These considerations would suggest that boys do not attain masculine sex-role identification without difficulty, notwithstanding the prestige of the male role and the power of parental pressures for appropriate sex-role adoption.

The establishment of appropriate sex-role identification may be easier for girls than boys. No shifts from their initial mother identifications are required, and typically girls spend more time with their mothers and other female models than do boys with male models. On this basis Lynn (1962) has hypothesized that during early childhood girls will be ahead of boys in the establishment of appropriate sex-role identifications. However, since flexibility and latitude are allowed girls in sex-role adoption, since the female role lacks prestige, and since mothers may, because of discontent with their roles, present less clear sex-role models than fathers, girls' feminine sex-role identifications may be weakened during later

childhood. Lynn (1959) does not specify the age at which it would be expected that boys would be more firmly identified with the masculine sex-role than girls with the feminine sex-role.

Human figure drawings constitute one of the few suitable techniques for the measurement of sex-role identification as distinguished from sex-role preference (Lynn, 1959). The hypothesis that certain characteristics of a subject's human figure drawings are indicative of sex-role identification may be traced to Machover (1949, 1953) who has stated that a person's body image tends to be projected into his drawings. She has postulated that sexual maladjustment is indicated when a figure of the opposite sex is drawn first or when differentiation between the sexes is "scrambled" or weak. She has also hypothesized that the relative sizes of the two drawings may be related to sex-role identification, since the larger of the two figures tends to be viewed by the subject as symbolic of the stronger sex.

An assumption common to the Draw-A-Person Test (hereafter sometimes referred to as DAPT) and other projective techniques involving human characters is that the subject devotes most attention to the character with whom he identifies most closely. Usually this character is the person most like the subject with respect to sex or age,

or both. Support for this assumption is provided by Richey (1965). Draw-A-Person Test human figures of one hundred ten-year-old children were scored on the Goodenough scale, and the children of both sexes earned higher scores on their own-sexed drawings than on those of the opposite sex.

Research generated by Machover's (1949) hypothesis with respect to the first drawn figure has been reviewed by Brown and Tolor (1957) and Swensen (1957). The preponderance of the evidence cited by these authors indicates that larger proportions of subjects of both sexes draw the same-sexed figure first. The studies reviewed also reveal that this tendency is stronger for adult males than females. This trend may have its beginning in childhood. The results from four research investigations (Bieliauskas, 1950; Butler and Marcuse, 1950; Jolles, 1952; Swensen and Newton, 1955), although inconclusive, suggest that with increasing age larger proportions of boys may draw the like-sexed figure first, while with increasing age a smaller proportion of girls may respond in this manner. The direction of sex differences in appropriate sex-role identification cannot be inferred, however, from research on the DAPT first drawn figure. Three studies (Weidner and Noller, 1950, 1953; Lynn and Sawrey, 1959) have shown that a larger proportion of elementary school age girls than boys draw the same-sexed figure first. Results from two similar

studies (Jolles, 1952; Butler and Marcuse, 1959) were in opposite direction, that is, more boys than girls drew the like-sexed figure first.

The relative sizes of the two human figure drawings and the extent of sexual differentiation between them have also been the subject of study. In both of their studies, Weidner and Noller (1950, 1953) found that a larger proportion of girls than of boys in the eight to twelve age group drew the same-sexed figure larger. Greater sexual differentiation between the two human figure drawings is also characteristic of girls, and for both sexes increased sexual differentiation is an indication of maturity (Swensen and Newton, 1955).

When research cited on all three Draw-A-Person Test indicators of sex-role identification is considered, sex of the first drawn figure, the relative sizes of the two human figures, and sexual differentiation between the drawings, it is apparent that boys of the elementary school age are still less strongly identified with their sex role than girls. Lynn's (1959) hypothesis, that the feminine sex-role identifications of girls are progressively weakened while the masculine sex-role identifications of boys are strengthened, is supported by research demonstrating that a larger proportion of adult males than females draw the same-sexed figure first. It is relevant to note, however, that although all three of the preceding characteristics of

Draw-A-Person Test drawings have been considered to be related to sex-role identification and the subject of study, no research has been undertaken to demonstrate that they tap a common behavioral dimension.

CHOICE OF PLAYMATES

Much of a child's daily activity is aimed at gratifying the primary needs, carrying out the socialization demands of adults, and solving realistic problems. However, part of the child's day is available for behaviors that are not reactions to environmental demands or to realistic problems. In these situations, the child is freed from behaving realistically; he can "go out and play."

Besides freeing mothers for their household duties, play serves several major functions. Mussen, Conger, and Kagan (1963) have outlined three important motives:

1. Play is a medium for the discharge of energy. Limitations on gross motor activity may be frustrating to young children, and episodes of vigorous activity appear to be necessary.

2. Play is used to practice new skills.

3. A third motive is the child's desire to practice behaviors of a role model (real or fantasied) in order to create in his mind some perception of similarity to the model. Many of the games children play involve fantasied

adult roles. These permit the child to participate vicariously in the adult world and to feel what it would be like to be an adult. (Role practice as conceptualized by Maccoby (1959) was discussed in an earlier section of this chapter.)

Soon after children begin to notice and play with others, many of them show preferences among their playmates. By the ages of three or four strong attachments between children occur. Friendships between children are influenced by such obvious factors as similarity in age, intelligence, and interests. When young children begin to enter into social relationships, distinctions between boys and girls are not likely to be noticeable. Boys and girls play together and enjoy the same activities. However, by the age of four years children show definite preferences for playmates of their own sex (McCandless and Hoyt, 1961), and this factor becomes increasingly important in playmate selection as children mature. By the time children enter the first grade, most of their playmates are members of their own sex. This preference pattern continues through childhood into adolescence (Dalke, 1953).

This voluntary sex-segregation of peer groups during childhood may be regarded as a process of reinforcement of sex-role identification (Parsons, 1961). Through association with like-sexed peers in sexually-patterned activities,

belongingness with other members of the same sex is reinforced. Moreover, like-sexed peers, sharing common needs and interests, are more likely to find each others' company satisfying.

Social attitudes of adults and peers also play an important role in fostering a social distance between the sexes in childhood. Children are rewarded by both parents and peers for being a "real" girl or a "real" boy and playing with like-sexed children. Lack of conformity to the approved sex role, as reflected in playmate preferences, however, may lead to non-acceptance, ridicule, and social ostracism. In the case of boys, social attitudes are not as tolerant as for girls. Since "A man is known by the company he keeps", both peers and adults may insist that a boy's companions be predominantly male. Girls, who are allowed more latitude in the whole area of sex-role adoption, may manifest preferences for male playmates with the risk of less social censure. This freedom manifests itself in a greater tendency for girls to seek companionship with boys, than boys with girls, beginning at the preschool age (McCandless and Hoyt, 1961).

SOCIOECONOMIC STATUS DIFFERENCES IN SEX-ROLE LEARNING

The content of the sex-role learning of children is dependent upon the socioeconomic status of the family to which they belong. The factors contributing to this

association include the following:

1. Child-rearing practices differ between socioeconomic strata.
2. Parents of different socioeconomic levels are conspicuously different as models for parental identification.
3. Interpretations of the cultural definitions of sex roles may vary between socioeconomic status groups.

Studies such as those of Maas (1951) and R. R. Sears et al. (1957) reveal that there are extensive differences in child-rearing practices between the lower and middle socioeconomic strata. Maas characterizes the parent-child relationships in lower socioeconomic status families as psychologically closed, hierarchial, and rigid and those in the middle socioeconomic group families as more open, equalitarian, and flexible. R. R. Sears et al. summarize socioeconomic status differences in child-rearing as follows:

By and large, the middle-class mothers were gentler than the working-class mothers. They were more permissive in four of the five major areas of socialization that we investigated, and they were less punitive toward changeworthy behavior in their children. They were relatively less object-oriented in their punishment techniques, and they were less restrictive about vigorous activity in the home and free-ranging exploration out of it. They were warmer toward their children, more comfortable with themselves, and had a more concordant relationship with their husbands so far as child-rearing was concerned. (R. R. Sears et al., 1957, pp. 433-434)

In the absence of directly relevant research, theorists

Johnson and Martin (1961), McCandless (1961) and Hartley (1964) have inferred socioeconomic status differences in sex-typing from the results of child-rearing practice studies. Johnson et al. suggest that sex-roles are more rigidly defined and differentiated earlier in life by lower socioeconomic status parents. McCandless presumes that boys of the lower socioeconomic stratum are under more pressure to adopt appropriate sex-role behavior than boys of middle socioeconomic status since "Girlish or sissy behavior on the part of the lower-class boy will be clearly and firmly disapproved of by both parents and peers, whereas, in the middle class such behavior is more likely to be tolerated" (McCandless, 1961, p. 335). He has also stated that girls of lower socioeconomic status are punished more often by their parents for showing aspects of the role behavior of the opposite sex and are subject to stronger peer pressures for appropriate sex-role identification than girls of middle socioeconomic status. The following is indicative of the contrary attitude taken by middle socioeconomic status parents: "While there seems to be a tendency to discourage girls from 'fisticuffs', most other interests and behaviors are viewed tolerantly during preschool years" (Hartley, 1964, p. 8). Acceptance of peer group definitions of appropriate sex-role behavior may be more compelling to lower socioeconomic status children, since they are more dependent upon the peer group than their

middle socioeconomic status counterparts (Maas, 1951).

Although lower socioeconomic status mothers and fathers may provide less warm, attractive, and successful models for their children than middle socioeconomic status parents, such models may be more distinctively masculine and feminine (McCandless, 1961). The adult masculine and feminine roles are more clearly differentiated in lower socioeconomic groups. Men of this group frequently assume fewer of the child-rearing or other traditionally feminine domestic duties than middle socioeconomic group fathers (Bronfenbrenner, 1961). Also, in their occupational roles lower socioeconomic status parents may provide clearer models for parental identification since the ways in which they earn their livelihood are usually readily observable by their children. Men usually do "man's work" and women traditionally do "womanly work," whereas in middle socioeconomic status groups both mothers and fathers may be in the same careers and the work involved may be more mysterious to their children.

From the above formulation it may be inferred that children of lower socioeconomic status will have a theoretical advantage over their middle socioeconomic status counterparts in sex-role learning. Research previously cited on sex-role preference supports this inference in the case of boys, but for girls research findings are less conclusive.

CHAPTER III

DERIVATION AND STATEMENT OF HYPOTHESES

A detailed examination of theory and research on the various related areas of sex-role learning was undertaken in Chapter II. The discussion in the preceding chapter began with a review of sex-role learning terminology. Various concepts used throughout the thesis, for example, sex-role identification, parental identification, and sex-role preference were defined and distinctions were drawn. In following sections theory and research were reviewed on parental identification and sex-typing, two related processes through which children come to learn and identify with the appropriate sex-role. Manifestations of appropriate sex-role learning were considered in the three sections which followed, namely, sex-role preference, sex-role identification and choice of playmates. The final portion of Chapter II was devoted to an analysis of socioeconomic status influences upon sex-role learning.

In the divisions of Chapter III which follow, relevant research and theory already dealt with in Chapter II are reintroduced. The purposes are twofold: first, to synthesize conceptions of the various aspects of sex-role learning, and secondly to provide clear bases for the

hypotheses to be investigated. In the context of the discussion, major hypotheses are expressed in general directional form. At the end of each section, operational definitions of variables are given and research hypotheses are stated explicitly in null form.

SEX-ROLE PREFERENCE

On pages 27, 28, and 29 of Chapter II sex differences in sex-role preference patterns were explained as follows:

Certain power and prestige characteristics of contemporary sex roles may discourage girls from preferring the female role although they may be identified with it. Various theorists (Komarovsky, 1953; Montagu, 1954; Brown, 1958; Lynn, 1961; Ellis, A. 1962; Ellis, H. 1962; Friedan, 1964; Adler, 1965) have described the socio-cultural privileges and advantages of being male in our patriarchal society. Moreover, children are aware of the inferiority and dependence of females in our society and view the father as wiser, stronger, and generally more competent than the mother (Kagan, 1956, 1960). This may arouse envy and make it difficult for a little girl to want to be female since femininity is synonymous with inferiority, submission, and dependence. The "masculine protest" of Adler (1965), that is manifested in girls by a masculine sex-role preference, may result. Insufficient or irregular encouragement of feminine tendencies in childhood (Brown, 1956), discontentment of mothers with their sex-role (Friedan, 1964), and the similarities in school curriculum, vocational opportunities, names, toys, and attire for girls and boys (Brown, 1958) may also be of importance in fostering male sex-role preference in girls. Since they are aware of the greater male prestige and prerogatives in our society and receive much encouragement for masculine tendencies, boys may be expected to manifest appropriate sex-role preference.

From this formulation the hypotheses emerge that both boys and girls will manifest preferences for the appropriate sex role, but that girls' preferences for the feminine role will not be as strong as those of boys for the masculine role. Socioeconomic status differences in the direction of stronger appropriate sex-role preferences by lower socioeconomic subjects are expected to result from a more rigid definition of children's sex roles, clearer differentiation of adult roles, stronger peer group pressures for sex-appropriate behavior, and more punishment of manifestations of inappropriate sex-role preference in lower socioeconomic status families.

The differences in sex-role preference as hypothesized above, are anticipated, however, only for the results of the It Scale for Children, a projective test. No sex or socioeconomic status differences are predicted on the basis of interrogation of subjects with respect to the preferred sex role. Rather, a stereotyped appropriate sex-role preference pattern is expected from this technique since children are aware that a preference for the appropriate sex role elicits more social approval than a preference for the opposite sex role.

Sex-Role Preference as Indicated by the It Scale for Children

Operational Definitions. Masculine sex-role preference is

operationally defined as the propensity of a child to choose toys, objects, and activities on the ITSC considered in our culture more appropriate for boys than for girls.

Feminine sex-role preference is operationally defined as the propensity of a child to choose toys, objects, and activities on the ITSC considered in our culture more appropriate for girls than for boys.

Statement of Hypotheses.

1. The preferences of boys for the masculine sex role and the feminine sex role will not differ in strength.
2. The preferences of girls for the masculine sex role and the feminine sex role will not differ in strength.
3. The masculine sex-role preferences of boys and the feminine sex-role preferences of girls will not differ in strength.
4. There will be no difference between lower SES children and upper-middle SES children in strength of preference for the appropriate sex-role.
5. There will be no difference between lower SES boys and upper-middle SES boys in strength of preference for the masculine sex role.
6. There will be no difference between lower SES girls and upper-middle SES girls in strength of preference for the feminine sex role.
7. The scores of boys who perceive "lt" as female

...the ... of the ...
...the ... of the ...
...the ... of the ...
...the ... of the ...
...the ... of the ...
...the ... of the ...
...the ... of the ...
...the ... of the ...

... of ...

1. The ... of the ...
2. The ... of the ...
3. The ... of the ...
4. The ... of the ...
5. The ... of the ...
6. The ... of the ...
7. The ... of the ...
8. The ... of the ...
9. The ... of the ...
10. The ... of the ...

will not differ from those of boys who perceive "It" as male.

8. The scores of girls who perceive "It" as female will not differ from those of girls who perceive "It" as male.

Sex-Role Preference as Indicated by Doll Play

Interrogation

Operational Definitions. Subjects were presented with a boy doll and a girl doll from the Lynn Structured Doll Play Test (Series II)¹ and the following instructions were given: "Let us make believe that this is a real boy and this is a real girl. Pretend you could be one of these children. Which would you rather be?"²

Masculine sex-role preference is operationally defined as the choice of the male doll in response to the above question, while feminine sex-role preference is defined as the choice of the female doll.

Statement of Hypotheses.

1. There will be no difference between the number of boys manifesting masculine sex-role preference and the number of boys manifesting feminine sex-role preference.

2. There will be no difference between the number of girls manifesting masculine sex-role preference and the

¹Published in 1960 by Test Developments, P.O. Box 8306, Denver, Colorado.

²The complete instructions are provided in Appendix C.

and the other two were of the same family. The first was a male, the second a female, and the third a male. They were all of the same age, and all of the same family.

THE FIRST OF THE THREE

The first of the three was a male, and he was of the same family as the other two. He was of the same age, and he was of the same family. He was of the same age, and he was of the same family. He was of the same age, and he was of the same family.

The second of the three was a female, and she was of the same family as the other two. She was of the same age, and she was of the same family. She was of the same age, and she was of the same family. She was of the same age, and she was of the same family.

THE SECOND OF THE THREE

The second of the three was a female, and she was of the same family as the other two. She was of the same age, and she was of the same family. She was of the same age, and she was of the same family. She was of the same age, and she was of the same family.

The third of the three was a male, and he was of the same family as the other two. He was of the same age, and he was of the same family. He was of the same age, and he was of the same family. He was of the same age, and he was of the same family.

The third of the three was a male, and he was of the same family as the other two. He was of the same age, and he was of the same family. He was of the same age, and he was of the same family. He was of the same age, and he was of the same family.

number of girls manifesting feminine sex-role preference.

3. The number of boys manifesting masculine sex-role preference will not differ from the number of girls manifesting feminine sex-role preference.

4. The numbers of children of lower SES and upper-middle SES manifesting appropriate sex-role preferences will not differ.

5. The numbers of boys of lower SES and upper-middle SES manifesting feminine sex-role preferences will not differ.

6. The numbers of girls of lower SES and upper-middle SES manifesting feminine sex-role preferences will not differ.

Relationships Between the Two Criteria of Sex-Role Preference

Positive relationships between subject's responses to the It Scale for Children and doll play interrogation with respect to the preferred sex role are not anticipated. This independence is hypothesized on the basis of the social desirability factor in the latter instrument, which was discussed in an earlier section of this chapter.

Statement of Hypotheses. There will be no significant relationship between the two criteria of sex-role preference (a) for lower SES boys, (b) for upper-middle SES boys,

(c) for lower SES girls, or (d) for upper-middle SES girls.

SEX-ROLE IDENTIFICATION

On the following bases it is hypothesized that girls will be more firmly identified with the feminine role than boys with the masculine role:

1. Boys must shift from their initial identifications with their mothers and achieve identifications with their fathers, whereas girls need make no such shifts.

2. Girls have a greater amount of contact with their mothers and other female models, than do boys with their fathers and other masculine models.

3. The female role tends to be defined conjunctively for girls, while the masculine role tends to be defined disjunctively for boys.

4. The nature of the adult masculine and feminine roles makes it possible for a girl to understand and participate in adult feminine role activities to a greater extent than can boys in adult masculine role activities.

A priori grounds for anticipating that lower socioeconomic status boys and girls will be more strongly identified with the appropriate sex-roles than their upper-middle socioeconomic status counterparts were presented in Chapter II. These differences were hypothesized to result from a more rigid definition of sex roles, stronger sex-

[illegible text]

[illegible title]

[illegible text]

[illegible text]

[illegible text]

[illegible text]

[illegible text]

[illegible text]

[illegible text]

[illegible text]

typing pressures, and a clearer differentiation of adult masculine and feminine roles in lower socioeconomic strata.

Operational Definitions. Since three measures of sex-role identification were obtained and the analysis was carried out independently for each, a like number of operational definitions of masculine and feminine sex-role identification are provided.

Masculine sex-role identification is defined as the tendency of a child (a) to draw the masculine figure first, (b) to draw the masculine figure larger, and (c) to differentiate between the masculine and feminine figures, on the Draw-A-Person Test.

Feminine sex-role identification is defined as the tendency of a child (a) to draw the feminine figure first, (b) to draw the feminine figure larger, and (c) to differentiate between the masculine and feminine figures, on the Draw-A-Person Test.

Statement of Hypotheses. Since the hypotheses for investigation listed below were identical for each of the three indicators of sex-role identification, they have been listed only once to avoid redundancy. However, for the purpose of clarity reference is made to subscripted hypotheses in the analysis. Those subscripted (a) refer to sex-role identification as indicated by the sex of the first

The following information is being furnished to you for your information and guidance.

General Information - This report contains information regarding the results of the investigation conducted by the Department of the Interior, Bureau of Land Management, in connection with the proposed project.

The following information is being furnished to you for your information and guidance:

(1) The results of the investigation conducted by the Department of the Interior, Bureau of Land Management, in connection with the proposed project.

(2) The results of the investigation conducted by the Department of the Interior, Bureau of Land Management, in connection with the proposed project.

The following information is being furnished to you for your information and guidance:

(1) The results of the investigation conducted by the Department of the Interior, Bureau of Land Management, in connection with the proposed project.

(2) The results of the investigation conducted by the Department of the Interior, Bureau of Land Management, in connection with the proposed project.

Summary of Findings - The results of the investigation conducted by the Department of the Interior, Bureau of Land Management, in connection with the proposed project, are summarized as follows:

The results of the investigation conducted by the Department of the Interior, Bureau of Land Management, in connection with the proposed project, are summarized as follows:

The results of the investigation conducted by the Department of the Interior, Bureau of Land Management, in connection with the proposed project, are summarized as follows:

drawn figure; those subscripted (b) refer to sex-role identification as indicated by the sex of the larger drawn figure; and those subscripted (c) refer to sex-role identification as indicated by the presence or absence of sexual differentiation between the two human figure drawings.

1. There will be no difference between the number of boys identified with the masculine sex-role and the number of boys identified with the feminine sex role.

2. There will be no difference between the number of girls identified with the masculine sex role and the number of girls identified with the feminine sex role.

3. The numbers of boys and girls identified with the appropriate sex role will not differ.

4. The numbers of children of lower SES and upper-middle SES identified with the appropriate sex role will not differ.

5. The numbers of boys of lower SES and upper-middle SES identified with the masculine sex role will not differ.

6. The numbers of girls of lower SES and upper-middle SES identified with the feminine sex role will not differ.

Relationships Among the Three Criteria of Sex-Role Identification

The hypothesis that the three Draw-A-Person Test

These figures show that the total number of persons in the United States who are employed in the service of the Government is about 1,000,000. This number includes the persons who are employed in the service of the Government in the various departments, bureaus, and offices, and also the persons who are employed in the service of the Government in the various States, Territories, and Possessions.

1. There will be a difference between the number of persons who are employed in the service of the Government in the various departments, bureaus, and offices, and the number of persons who are employed in the service of the Government in the various States, Territories, and Possessions.

2. There will be a difference between the number of persons who are employed in the service of the Government in the various departments, bureaus, and offices, and the number of persons who are employed in the service of the Government in the various States, Territories, and Possessions.

3. The number of persons who are employed in the service of the Government in the various departments, bureaus, and offices, and the number of persons who are employed in the service of the Government in the various States, Territories, and Possessions.

4. The number of persons who are employed in the service of the Government in the various departments, bureaus, and offices, and the number of persons who are employed in the service of the Government in the various States, Territories, and Possessions.

5. The number of persons who are employed in the service of the Government in the various departments, bureaus, and offices, and the number of persons who are employed in the service of the Government in the various States, Territories, and Possessions.

6. The number of persons who are employed in the service of the Government in the various departments, bureaus, and offices, and the number of persons who are employed in the service of the Government in the various States, Territories, and Possessions.

7. The number of persons who are employed in the service of the Government in the various departments, bureaus, and offices, and the number of persons who are employed in the service of the Government in the various States, Territories, and Possessions.

8. The number of persons who are employed in the service of the Government in the various departments, bureaus, and offices, and the number of persons who are employed in the service of the Government in the various States, Territories, and Possessions.

indicators of sex-role identification considered in this study would be positively related emerges from the assertions of Machover (1949, 1953). She has stated that sex of the first drawn figure, sex of the larger drawn figure, and sexual differentiation between the two human figures are all related to sex-role identification. However, no previous research has been undertaken to explore the relationships among these three Draw-A-Person Test characteristics.

Statement of Hypotheses. There will be no significant relationships among the three criteria of sex-role identification (a) for lower SES boys, (b) for upper-middle SES boys, (c) for lower SES girls, or (d) for upper-middle SES girls.

CHILDREN'S PERCEPTIONS OF PARENTAL PREFERENCES FOR SEX-ROLE ADOPTION

In Chapter II research was reviewed which showed that parents consciously use different child-rearing practices with boys and girls and expect sex differences in their behavior, even at an early age. During early childhood children are aware of sex-appropriate activities and the wishes of their parents for appropriate sex-role adoption. Since in our society "tomboyish" behavior by a girl evokes less social censure than "girlish" behavior by a boy, it

was postulated that girls may be allowed more freedom and latitude in their sex-role adoption than boys (Brown, 1958; Hall and Keith, 1964). This formulation provides a priori grounds for hypothesizing that boys and girls will perceive their parents as preferring appropriate sex-role adoption, but that boys will perceive themselves as subject to stronger parental sex-typing pressures than will girls. Socioeconomic status differences are expected as well. It is hypothesized that lower SES boys and girls will perceive themselves to be under stronger parental pressures for appropriate sex-role adoption than their upper-middle socioeconomic status counterparts. Factors contributing to socioeconomic status differences are as follows:

1. Sex roles are more rigidly defined and differentiated earlier in life by lower socioeconomic status parents.
2. Boys and girls of lower socioeconomic strata are under more pressure to adopt appropriate sex-role behavior than upper-middle socioeconomic status boys and girls, since manifestations of sex-inappropriate behavior are more firmly disapproved of by both their parents and their peers.

Operational Definitions. A child's perception of parental preferences for sex-role adoption is defined as the tendency of a child to perceive his or her parents as preferring him or her to play with sex-appropriate or sex-inappropriate toys as depicted in a modification of the Toy Preference Test.

Statement of Hypotheses.

1. Children will perceive the preferences of their parents for appropriate sex-role adoption and inappropriate sex-role adoption as not differing in strength.

2. Boys will perceive the preferences of their parents for masculine sex-role adoption and feminine sex-role adoption as not differing in strength.

3. Girls will perceive the preferences of their parents for masculine sex-role adoption and feminine sex-role adoption as not differing in strength.

4. Boys' perceptions of the strength of their parents' preferences for masculine sex-role adoption will not differ from girls' perceptions of the strength of their parents' preferences for feminine sex-role adoption.

5. Lower SES children's perceptions of the strength of their parents' preferences for appropriate sex-role adoption will not differ from those of upper-middle SES children.

6. Lower SES girls' perceptions of the strength of their parents' preferences for feminine sex-role adoption will not differ from those of upper-middle SES girls.

7. Lower SES boys' perceptions of the strength of their parents' preferences for masculine sex-role adoption will not differ from those of upper-middle SES boys.

CHOICE OF PLAYMATES

In Chapter II it was stated that children's choices of masculine or feminine playmates were an example of sex-role adoption. In this respect it was also indicated that more latitude in sex-role adoption is allowed girls than boys, and middle-class children as compared to lower-class children. On this basis it may be hypothesized that more boys than girls, and more lower socioeconomic status children than upper-middle socioeconomic status children, will manifest preferences for like-sexed playmates.

Operational Definitions. Subjects were presented with a boy doll and a girl doll from the Lynn Structured Doll Play Test. After being urged to pretend that the dolls were real, the subjects were asked to indicate which of the two children they would rather play with.¹

The choice of the like-sexed doll by a subject was defined as indicating a preference for a same-sexed playmate. The choice of the doll of the opposite sex was defined as indicating a preference for an opposite-sexed playmate.

Statement of Hypotheses.

¹The complete directions are provided in Appendix C.

1. The number of children manifesting preferences for like-sexed playmates will not differ from the number of children manifesting preferences for opposite-sexed playmates.

2. The number of boys manifesting preferences for male playmates will not differ from the number of boys manifesting preferences for female playmates.

3. The number of girls manifesting preferences for male playmates will not differ from the number of girls manifesting preferences for female playmates.

4. The number of boys manifesting preferences for male playmates will not differ from the number of girls manifesting preferences for female playmates.

5. The number of children of lower SES and upper-middle SES manifesting preferences for like-sexed playmates will not differ.

6. The number of boys of lower SES and upper-middle SES manifesting preferences for male playmates will not differ.

7. The number of girls of lower SES and upper-middle manifesting preferences for female playmates will not differ.

RELATIONSHIPS AMONG THE VARIOUS CRITERIA OF SEX-ROLE LEARNING

Positive relationships among the criteria of sex-role identification, sex-role preference, children's perceptions

of parental preferences for sex-role adoption, and playmate preferences are hypothesized. These positive correlations are anticipated since the latter three variables are all related aspects of sex-role identification. As these theoretical relationships have been considered at some length in Chapter II, further elaboration here is not warranted.

Statement of Hypotheses. There will be no significant relationships among the criteria of sex-role identification, sex-role preference, choice of playmates, and children's perceptions of parental preferences for sex-role adoption (a) for lower SES boys, (b) for upper-middle SES boys, (c) for lower SES girls, or (d) for upper-middle SES girls.

to provide information for the...
...
...
...
...
...
...
...
...

...
...
...
...
...
...
...
...
...

CHAPTER IV

RESEARCH DESIGN

THE SAMPLE

Sampling Criteria

The sample for this study consisted of one hundred Grade I students, fifty boys and fifty girls, selected from five Edmonton Public Schools. The following criteria were considered in the selection of the sample.

Age and Grade. Selection was restricted to those students in attendance for their first year of Grade I. Students repeating the grade were excluded to reduce age variability. Age means, standard deviations, and ranges in months are presented in Table I.

Socioeconomic Status of the Family. The sample was chosen in such a way as to include twenty-five children of each sex from families of both lower and upper-middle socioeconomic status. Socioeconomic status of family was determined on the basis of the family's residential community and the father's occupation. Several authorities (Davis and Havighurst, 1946; Hollingshead and Redlich, 1958; Warner, Meeker, and Eells, 1960) have considered these two

THE STATE

OF NEW YORK

IN SENATE

January 10, 1901

REPORT OF THE COMMISSIONERS OF THE LAND OFFICE
IN RESPONSE TO A RESOLUTION PASSED BY THE SENATE
JANUARY 10, 1899. BY JAMES C. HARRIS, COMMISSIONER.

ALBANY: J. B. LIPPINCOTT & CO., PRINTERS.
1901.

Publication of the Report of the Commission on the
Land Office, 1901. The report of the Commission on the
Land Office, 1901, is a valuable contribution to the
knowledge of the land resources of the State. It contains
a detailed description of the land resources of the State,
and a statement of the progress of the land office since
its organization in 1892. The report is a valuable
contribution to the knowledge of the land resources of the
State, and is a valuable contribution to the knowledge of the
progress of the land office since its organization in 1892.

TABLE I

AGE MEANS, STANDARD DEVIATIONS AND RANGES IN MONTHS FOR THE SAMPLE BY SEX,
BY SES AND BY SEX AND SES

	N	Mean	S.D.	Range
<u>By Sex</u>				
Boys	50	77.58	3.60	71-83
Girls	50	77.78	3.77	72-86
<u>By SES</u>				
Lower SES	50	77.52	3.87	71-86
Upper-Middle SES	50	77.84	3.49	72-85
<u>By Sex and SES</u>				
Lower SES Girls	25	77.28	4.13	72-86
Upper-Middle SES Girls	25	78.28	3.29	73-85
Lower SES Boys	25	77.76	3.57	71-83
Upper-Middle SES Boys	25	77.40	3.63	72-83
Total Sample	100	77.68	3.69	71-86

criteria as the most important in the determination of socioeconomic status.

No attempt was made to classify the children's residences house by house. Rather, the communities were rated. All of the subjects of upper-middle socioeconomic status were selected from two schools serving prestigious communities where the real estate values are high. All of the lower socioeconomic subjects were chosen from three schools in "working class" communities where the real estate values are low and there is some evidence of property deterioration.

The fathers' occupations were categorized on the basis of the Canadian Occupational Scale (Blishen, 1958). This scale is based on the educational requirements of occupations and the average incomes they provide. The norming distribution is in normalized T-score form. It ranges from thirty-two to ninety, and has been divided into seven categories. The sample of upper-middle socioeconomic children was chosen from those whose father's occupations fell in Category I or Category II (range 57.0 to 90.0). These occupations are mainly professional, business, and managerial. Lower socioeconomic status subjects were selected from those children whose father's occupations were in Category V, Category VI, or Category VII (range 32.0 to 50.4). Most of the occupations in these

colours as the most important in the development of
colours in the eye.

The results are as follows:

1. The results of the experiments are as follows:

2. The results of the experiments are as follows:

3. The results of the experiments are as follows:

4. The results of the experiments are as follows:

5. The results of the experiments are as follows:

6. The results of the experiments are as follows:

7. The results of the experiments are as follows:

8. The results of the experiments are as follows:

9. The results of the experiments are as follows:

10. The results of the experiments are as follows:

11. The results of the experiments are as follows:

12. The results of the experiments are as follows:

13. The results of the experiments are as follows:

14. The results of the experiments are as follows:

15. The results of the experiments are as follows:

16. The results of the experiments are as follows:

17. The results of the experiments are as follows:

18. The results of the experiments are as follows:

19. The results of the experiments are as follows:

20. The results of the experiments are as follows:

21. The results of the experiments are as follows:

three categories are manual, both skilled and unskilled. The distribution of occupations of the fathers of the sample of children is provided in Table II.

Intelligence. Approximately three months before the testing for this study was carried out the Grade I students in all of the schools from which the sample was chosen had been given the Detroit Beginning First Grade Intelligence Test (Revised Form A). In the Edmonton Public Schools, at the beginning of each school year, qualified school personnel administer this test routinely to all students entering Grade I. Local norms ($\bar{X} = 100$, S.D. = 15) which were established in the fall of 1963 are used.

The performance of the sample on this test is indicated in Table III. Students with deviation intelligence quotients below 75 were not considered for inclusion in the sample since they may have encountered difficulty in comprehending the experimental directions. Although it is assumed that sex-role learning is to some extent dependent upon intelligence, no matching of individuals or groups on this basis was undertaken. Since there is a heavy cultural bias in verbal intelligence tests, as Table III attests, matching of differing socioeconomic status groups on intelligence test scores necessarily precludes representative sampling and hence the generalizability of results.

TABLE II

DISTRIBUTION OF OCCUPATIONS ON THE CANADIAN OCCUPATIONAL SCALE FOR FATHERS
OF THE SAMPLE OF CHILDREN BY SEX AND SES

Occupational Category	T-Score Ranges	Upper-Middle SES			Lower SES		
		Boys	Girls	Total	Boys	Girls	Total
I	73.2-90.0	8	8	16	0	0	0
II	57.0-72.9	17	17	34	0	0	0
III	52.0-56.9	0	0	0	0	0	0
IV	50.5-51.9	0	0	0	0	0	0
V	45.1-50.4	0	0	0	13	9	22
VI	41.8-45.0	0	0	0	10	14	24
VII	32.0-41.8	0	0	0	2	2	4
Totals		25	25	50	25	25	50

TABLE II

THE EFFECT OF VARIOUS FACTORS ON THE RATE OF GROWTH OF THE LARVAE OF THE MOSQUITO, *CULEX TRITA* (MEG.)

Temperature of water		Food		Light		Oxygen		Humidity	
°C.	F.	Amount	Quality	Intensity	Duration	Amount	Quality	Amount	Quality
20	68	10	Good	10	12	10	Good	10	Good
22	72	10	Good	10	12	10	Good	10	Good
24	75	10	Good	10	12	10	Good	10	Good
26	79	10	Good	10	12	10	Good	10	Good
28	82	10	Good	10	12	10	Good	10	Good
30	86	10	Good	10	12	10	Good	10	Good
32	90	10	Good	10	12	10	Good	10	Good
34	93	10	Good	10	12	10	Good	10	Good
36	97	10	Good	10	12	10	Good	10	Good
38	100	10	Good	10	12	10	Good	10	Good
40	104	10	Good	10	12	10	Good	10	Good
42	108	10	Good	10	12	10	Good	10	Good
44	111	10	Good	10	12	10	Good	10	Good
46	115	10	Good	10	12	10	Good	10	Good
48	118	10	Good	10	12	10	Good	10	Good
50	122	10	Good	10	12	10	Good	10	Good
52	126	10	Good	10	12	10	Good	10	Good
54	130	10	Good	10	12	10	Good	10	Good
56	133	10	Good	10	12	10	Good	10	Good
58	136	10	Good	10	12	10	Good	10	Good
60	140	10	Good	10	12	10	Good	10	Good
62	144	10	Good	10	12	10	Good	10	Good
64	147	10	Good	10	12	10	Good	10	Good
66	150	10	Good	10	12	10	Good	10	Good
68	154	10	Good	10	12	10	Good	10	Good
70	158	10	Good	10	12	10	Good	10	Good
72	160	10	Good	10	12	10	Good	10	Good
74	165	10	Good	10	12	10	Good	10	Good
76	169	10	Good	10	12	10	Good	10	Good
78	172	10	Good	10	12	10	Good	10	Good
80	176	10	Good	10	12	10	Good	10	Good
82	180	10	Good	10	12	10	Good	10	Good
84	183	10	Good	10	12	10	Good	10	Good
86	187	10	Good	10	12	10	Good	10	Good
88	190	10	Good	10	12	10	Good	10	Good
90	194	10	Good	10	12	10	Good	10	Good
92	197	10	Good	10	12	10	Good	10	Good
94	201	10	Good	10	12	10	Good	10	Good
96	205	10	Good	10	12	10	Good	10	Good
98	209	10	Good	10	12	10	Good	10	Good
100	212	10	Good	10	12	10	Good	10	Good

TABLE III

DETROIT BEGINNING FIRST GRADE INTELLIGENCE TEST (REVISED FORM A) DEVIATION
I.Q. MEANS, STANDARD DEVIATIONS, AND RANGES FOR THE SAMPLE BY SEX, BY SES,
AND BY SEX AND SES

	N	Mean	S.D.	Range
<u>By Sex</u>				
Boys	50	103.82	15.26	75-138
Girls	50	104.64	15.61	77-145
<u>By SES</u>				
Lower SES	50	96.88	13.26	75-128
Upper-Middle SES	50	111.58	13.89	80-145
<u>By Sex and SES</u>				
Lower SES Girls	25	97.24	13.13	77-128
Upper-Middle SES Girls	25	112.04	14.33	88-145
Lower SES Boys	25	96.52	13.39	75-119
Upper-Middle SES Boys	25	111.12	13.42	80-138
Total Sample	100	104.23	15.44	75-145

THE TABLE

THE TABLE IS A SUMMARY OF THE RESULTS OF THE INVESTIGATION INTO THE CAUSES OF THE ACCIDENT. IT IS A SUMMARY OF THE RESULTS OF THE INVESTIGATION INTO THE CAUSES OF THE ACCIDENT. IT IS A SUMMARY OF THE RESULTS OF THE INVESTIGATION INTO THE CAUSES OF THE ACCIDENT.

				1990
				1991
				1992
				1993
				1994
				1995
				1996
				1997
				1998
				1999
				2000
				2001
				2002
				2003
				2004
				2005
				2006
				2007
				2008
				2009
				2010
				2011
				2012
				2013
				2014
				2015
				2016
				2017
				2018
				2019
				2020
				2021
				2022
				2023
				2024
				2025
				2026
				2027
				2028
				2029
				2030
				2031
				2032
				2033
				2034
				2035
				2036
				2037
				2038
				2039
				2040
				2041
				2042
				2043
				2044
				2045
				2046
				2047
				2048
				2049
				2050
				2051
				2052
				2053
				2054
				2055
				2056
				2057
				2058
				2059
				2060
				2061
				2062
				2063
				2064
				2065
				2066
				2067
				2068
				2069
				2070
				2071
				2072
				2073
				2074
				2075
				2076
				2077
				2078
				2079
				2080
				2081
				2082
				2083
				2084
				2085
				2086
				2087
				2088
				2089
				2090
				2091
				2092
				2093
				2094
				2095
				2096
				2097
				2098
				2099
				2100
				2101
				2102
				2103
				2104
				2105
				2106
				2107
				2108
				2109
				2110
				2111
				2112
				2113
				2114
				2115
				2116
				2117
				2118
				2119
				2120
				2121
				2122
				2123
				2124
				2125
				2126
				2127
				2128
				2129
				2130
				2131
				2132
				2133
				2134
				2135
				2136
				2137
				2138
				2139
				2140
				2141
				2142
				2143
				2144
				2145
				2146
				2147
				2148
				2149
				2150
				2151
				2152
				2153
				2154
				2155
				2156
				2157
				2158
				2159
				2160
				2161
				2162
				2163
				2164
				2165
				2166
				2167
				2168
				2169
				2170
				2171
				2172
				2173
				2174
				2175
				2176
				2177
				2178
				2179
				2180
				2181
				2182
				2183
				2184
				2185
				2186
				2187
				2188
				2189
				2190
				2191
				2192
				2193
				2194
				2195
				2196
				2197
				2198
				2199
				2200
				2201
				2202
				2203
				2204
				2205
				2206
				2207
				2208
				2209
				2210
				2211
				2212
				2213
				2214
				2215
				2216
				2217
				2218
				2219
				2220
				2221
				2222
				2223
				2224
				2225
				2226
				2227
				2228
				2229
				2230
				2231
				2232
				2233
				2234
				2235
				2236
				2237
				2238
				2239
				2240
				2241
				2242
				2243
				2244
				2245
				2246
				2247
				2248
				2249
				2250
				2251
				2252
				2253
				2254
				2255
				2256
				2257
				2258
				2259
				2260
				2261
				2262
				2263
				2264
				2265
				2266
				2267
				2268
				2269
				2270
				2271
				2272
				2273
				2274
				2275
				2276
				2277
				2278
				2279
				2280
				2281
				2282
				2283
				2284
				2285
				2286
				2287
				2288
				2289
				2290
				2291
				2292
				2293
				2294
				2295
				2296
				2297
				2298
				2299
				2300
				2301
				2302
				2303
				2304
				2305
				2306
				2307
				2308
				2309
				2310
				2311
				2312
				2313
				2314
				2315
				2316
				2317
				2318
				2319
				2320
				2321
				2322
				2323
				2324
				2325
				2326
				2327
				2328
				2329
				2330
				2331
				2332
				2333
				2334
				2335
				2336
				2337
				2338
				2339
				2340
				2341
				2342
				2343
				2344
				2345
				2346
				2347
				2348
				2349
				2350
				2351
				2352
				2353
				2354
				2355
				2356
				2357
				2358
				2359
				2360
				2361
				2362
				2363
				2364
				2365
				2366
				2367
				2368
				2369
				2370
				2371
				2372
				2373
				2374
				2375
				2376
				2377
				2378
				2379
				2380
				2381
				2382
				2383
				2384
				2385
				2386
				2387
				2388
				2389
				2390
				2391
				2392
				2393
				2394
				2395
				2396
				2397
				2398
				2399
				2400
				2401
				2402
				2403
				2404
				2405
				2406
				2407
				2408
				2409
				2410
				2411
				2412
				2413
				2414
				2415
				2416
				2417
				2418
				2419
				2420
				2421
				2422
				2423
				2424
				2425
				2426
				2427
				2428
				2429
				2430
				2431
				2432
				2433
				2434
				2435
				2436
				2437
				2438
				2439
				2440
				2441
				2442
				2443
				2444
				2445
				2446
				2447
				2448
				2449
				2450
				2451
				2452
				2453
				2454
				2455
				2456
				2457
				2458
				2459
				2460
				2461
				2462
				2463
				2464
				2465
				2466
				2467
				2468
				2469
				2470
				2471
				2472
				2473
				2474
				2475
				2476
				2477
				2478
				2479
				2480
				2481
				2482
				2483
				2484
				2485
				2486
				2487
				2488
				2489
				2490
				2491
				2492
				2493
				2494
				2495
				2496
				2497
				2498
				2499
				2500
				2501
				2502
				2503
				2504
				2505
				2506
				2507
				2508
				2509
				2510
				2511
				2512
				2513
				2514
				2515
				2516
				2517
				2518
				2519
				2520
				2521
				2522
				2523
				2524
				2525
				2526
				2527
				2528
				2529
				2530
				2531
				2532
				2533
				2534
				2535
				2536
				2537
				2538
				2539
				2540
				2541
				2542
				2543
				2544
				2545
				2546
				2547
				2548
				2549
				2550
				2551
				2552
				2553
				2554
				2555
				2556
				2557
				2558
				2559
				2560
				2561
				2562
				2563
				2564
				2565
				2566
				2567
				2568
				2569
				2570
				2571
				2572
				2573
				2574
				2575
				2576
				2577
				2578
				2579
				2580
				2581
				2582
				2583
				2584
				2585
				2586
				2587
				2588
				2589
				2590
				2591
				2592
				2593
				2594
				2595
				2596
				2597
				2598
				2599
				2600
				2601
				2602
				2603
				2604
				2605
				2606
				2607
				2608

Broken Homes. Children from broken homes, where the lack of one parent would have resulted in atypical opportunities for sex-role learning, were not included in the sample.

Ethnic Background of the Parents. The data on the schools' cumulative record cards with respect to the ethnic origins of the mother and father were noted for each subject included in the sample. On the basis of these data, which in many cases were incomplete, the impression was obtained that upper-middle socioeconomic status children were predominantly of Anglo-Saxon ancestry, while the majority of those of lower socioeconomic status were of continental European origin. Blishen's (1958) study indicates, however, that Anglo-Saxons are in fact over-represented in higher socioeconomic status occupations, while people of continental European ancestry are over-represented in lower socio-economic status occupations.

Family Size, Birth-Order, and Siblings. The effects of family size, birth-order, and same-sexed siblings upon sex-role learning, studied independently by some researchers, were not controlled in this study. It is assumed that the sex and socioeconomic status subsamples are equivalent in these respects, and if not that they reflect real differences in the populations from which they were drawn. Some support for this assumption is provided in Table IV. In

TABLE IV

MEANS, STANDARD DEVIATIONS, AND RANGES OF FAMILY SIZE FOR THE SAMPLE BY SEX,
BY SES, AND BY SEX AND SES

	N	Mean	S.D.	Range
<u>By Sex</u>				
Boys	50	3.54	1.64	2-10
Girls	50	3.42	1.39	1-7
<u>By SES</u>				
Lower SES	50	3.58	1.86	1-10
Upper-Middle SES	50	3.38	1.04	2-7
<u>By Sex and SES</u>				
Lower SES Girls	25	3.64	1.74	1-7
Upper-Middle SES Girls	25	3.20	.85	2-5
Lower SES Boys	25	3.52	1.96	2-10
Upper-Middle SES Boys	25	3.56	1.17	2-7
Total Sample	100	3.48	1.51	1-10

Table 1

Table 1 shows the results of the regression analysis. The dependent variable is the log of the number of employees. The independent variables are the log of the number of sales, the log of the number of assets, and the log of the number of liabilities. The results show that the log of the number of sales is positively correlated with the log of the number of employees, while the log of the number of assets and the log of the number of liabilities are negatively correlated with the log of the number of employees.

Variable	Log of Sales	Log of Assets	Log of Liabilities
Constant	1.12	0.85	0.68
Log of Sales	0.75	-0.12	-0.08
Log of Assets	-0.12	0.75	-0.15
Log of Liabilities	-0.08	-0.15	0.75
Adjusted R-squared	0.85	0.82	0.80
F-statistic	12.5	11.8	11.2
Prob > F	0.0001	0.0001	0.0001
Log of Sales	0.75	-0.12	-0.08
Log of Assets	-0.12	0.75	-0.15
Log of Liabilities	-0.08	-0.15	0.75
Adjusted R-squared	0.85	0.82	0.80
F-statistic	12.5	11.8	11.2
Prob > F	0.0001	0.0001	0.0001

terms of family size, there are only slight differences between the subsamples.

Sample Selection

In the actual selection of the sample the preceding criteria were taken into account as follows. As a point of departure it was decided to select the fifty upper-middle socioeconomic status subjects from the two schools serving prestigious communities, and the fifty lower socioeconomic status subjects from schools located in three deteriorating "working class" communities. All of the Grade I students attending these schools were then considered as potential subjects. Subsequently, the cumulative record cards were inspected and the children's names were listed along with the sampling criteria details. Separate lists of lower SES boys, lower SES girls, upper-middle SES boys, and upper-middle SES girls were prepared. Names were deleted from each list if the student was repeating Grade I, if he had scored below a deviation intelligence quotient of 75 on the Detroit Beginning First Grade Intelligence Test (administered earlier in the school term), if his father's occupation fell outside the previously defined limits on the Canadian Occupational Scale, or if he was from a broken home. The remaining names on each of the four lists were numbered sequentially. A table of random numbers was used to reduce each list to twenty-five.

Information with respect to ethnic background of the parents, family size, birth order, and siblings was obtained from the cumulative record cards, but for descriptive purposes only. These variables were not taken into account in the actual selection of the sample.

DESCRIPTION OF INSTRUMENTS, ADMINISTRATION, AND SCORING PROCEDURES

Sex-Role Preference

The It Scale for Children. The ITSC¹, consisting of thirty-six picture cards depicting various objects, figures, and activities commonly associated with the masculine and feminine roles, was developed by Brown (1956) as a measure of sex-role preference. The total range of the ITSC is from zero, an exclusively feminine score, to eighty-four, an exclusively masculine score. A score of forty-two is a relatively intermediate preference between masculine and feminine roles, and deviations above and below this score are in the direction of masculinity and femininity, respectively.

To ensure that responses are not merely conformity to social expectations, subjects make choices for a sexually ambiguous child-figure drawing, "It". Brown (1956) assumes

¹Published by Psychological Test Specialists,
Box 1441, Missoula, Montana.

that a child will project himself or herself into the "It" figure on the bases of his or her own sex-role preference, and will attribute to "It" his or her preference. He states that "the kinds of objects and activities typical for boys in contrast to girls and vice versa, along with the more obvious differences between adult masculine and feminine roles to which the child is continually exposed" (Brown, 1956, pp. 4-5), formed the basis for the ITSC content. According to Brown the logic and validity of the scale rests primarily on the assumption that what is socially regarded as, and actually associated with, masculine or feminine behavior is an adequate basis for defining sex-role patterns.

Retest reliability of the scale over a one month interval for the original norming group of 146 five-and six-year-olds was reported as .71 for girls and .84 for boys. This compares favorably with reliability figures for other instruments used in measuring various personality characteristics of children.

This instrument was administered according to the manual of directions¹ which provides that the order of presenting the various sections and items of the scale and their spatial arrangement be randomized. Following the

¹The directions for administering this test are reproduced in Appendix A.

administration of the ITSC each subject was asked to give "It" a name, and a sex if the name given did not unquestionably imply this. Scoring forms were used to record the choices of each subject.¹ For boys, points were assigned according to the weighting suggested in the manual of directions. For girls, the respective weights assigned to the various test items were not altered, but the score scale was reversed. This can be best illustrated through an example. In the "Eight Paired Pictures" section of the test, the manual directions provide that for both boys and girls eight points be assigned for each male preference and zero for each female preference. The scoring procedure used for boys did not deviate from the suggested method, but for girls eight points were assigned for feminine preferences, and zero for masculine preferences. The resulting scale for both boys and girls ranges from zero, an exclusively opposite sex-role preference (in Brown's method, exclusively feminine sex-role preference) to eighty-four, an exclusively appropriate sex-role preference (in Brown's method, an exclusively masculine sex-role preference).

By using an "appropriateness" scale a subject's score can be more easily interpreted without knowing his sex. For example, a score of eighty would represent a

¹See Appendix B.

high appropriate sex-role preference for both a boy and a girl. This procedure makes it possible to make cross sex-comparisons by using the actual scores for subjects, rather than using their deviation scores from the extremities of the scale.

Doll Play Interrogation.¹ Subjects were presented with a boy doll and a girl doll from the Lynn Structured Doll Play Test (Series II) and the following directions were given: "Let us make believe that this is a real boy and this is a real girl. Pretend you could be one of these children. Which would you rather be?"

Sex-Role Identification

The Draw-A-Person Test. On the DAPT a subject is first requested to draw a whole person. Subsequently, he or she is asked to draw a figure of the same level of maturity as the first drawn figure, but of the opposite sex. Reliability figures for this test are available for the sex of the first drawn figure, but not for the sex of the larger drawn figure or for sexual differentiation. In a reliability study Starr (1959) reported that upon retest only 10% of the male college students varied in the sex of the first

¹These directions were discussed in Chapter III, but they are repeated here for the purposes of clarity.

drawn figure. Fisher (1960) found that only twelve per cent of the male retarded subjects under study varied the sex of the first drawn figure in the second administration of this test.

In this thesis subjects were presented with a black crayon and a $8\frac{1}{2}$ " x 11" sheet of drawing paper placed in an upright position. The test was then administered in the usual manner.¹ Upon completion of the first drawing, each subject was asked to tell about his picture unless he or she had already spontaneously identified the figure by sex and level of maturity. If the invitation to tell about the drawing failed to evoke this information, the subject was asked, "Who is it?" This drawing was then concealed and another piece of drawing paper was presented as before. According to the sex and level of maturity of the first drawn figure, the child was requested to draw a man, lady, girl, and so on.

The sex of the first drawn figure was ascribed according to the procedure described above. The sex of the larger drawn figure was determined by measuring the vertical heights of the human figures with a ruler. The measures were taken from the uppermost point (excluding arms extended over the head) to the lowermost point, on a line parallel to the central axis of the body.

¹Instructions for the administration of this test are provided in Appendix D.

The one hundred sets of two drawings were rated for sexual differentiation independently by three graduate students of Educational Psychology (two males, one female). The raters were presented with the written instructions in Appendix E, which provide for a dichotomous decision, differentiated or indifferentiated. When the judges' ratings did not agree, the majority view was taken.

Children's Perceptions of Parental Preferences for
Sex-Role Adoption

The Toy Preference Test. The Toy Preference Test consists of twenty-four picture cards of children's toys. When it is administered in its usual form a subject is asked to choose from the two toys on each card the one that an ego cardboard doll would like to play with. DeLucia (1963) has determined the sex-suitability of each toy by obtaining the ratings of a class of psychology students. The class rated each toy on a scale ranging from one, strongly masculine, through five, equal suitability for a boy or girl, to nine, strongly feminine. The ratings were pooled to provide an index of sex-suitability for each toy. Three types of picture pairs are included in the test: a masculine and feminine toy, two masculine toys, and two feminine toys. Scores in each case, however, are assigned on the basis of the appropriateness of the choice considering the

sex of the subject, for example, for a boy, the choice of the lesser of two feminine toys.

The scale is constructed in such a way as to overcome left to right response sets and choices on the basis of size, cost, and manipulability. The retest reliability when this test is readministered to children in kindergarten through the fourth grade is reported to range from .67 to .72 (DeLucia, 1963).

Since the Toy Preference Test has not been published it was not possible to use this instrument in its original form. It was necessary, therefore, to reproduce the test from the description provided by the author (DeLucia, 1963). This was accomplished by making outline drawings of the twenty-four sets of two toys, using a catalogue of children's toys as a guide. The sizes of the cards, the toys depicted on each, and their placement upon the cards all corresponded to the DeLucia specifications.

Three additional toy preference cards were also made for use as examples in explaining the directions to the subjects. A mother doll, a father doll, a boy doll, and a girl doll from the Lynn Structured Doll Play Test were also utilized. A subject was presented with a like-sexed doll and either the mother or the father doll. The three samples and cards one through twenty-four were then sequentially administered by asking the child in each case to indicate

the toy the parent doll would prefer the child doll to play with. When this was completed the first parent doll was taken away and the other parent doll was introduced. Cards one through twenty-four were then readministered.¹ The order of introducing the parent dolls was alternated with each subject to prevent an order interaction.

The scores were assigned on the basis of one point for a sex-appropriate response, and zero for a sex-inappropriate response. The maximum score was forty-eight (twenty-four for each parent), and the minimum, zero. A score above twenty-four would indicate that a child perceives his parents as desiring appropriate sex-role adoption; a score of twenty-four would indicate that a child perceives his parents as equally favoring the adoption of masculine and feminine sex-role behavior; and a score below twenty-four would indicate that the child perceives his parents as desiring inappropriate sex-role adoption.

Choice of Playmates²

Doll Play Interrogation. Subjects were presented with a boy doll and a girl doll from the Lynn Structured Doll Play Test. After being urged to pretend that the dolls were real

¹The complete test instructions and the score sheet used are provided in Appendix G and Appendix H, respectively. In Appendix G, the more masculine toys are in full capital letters.

²These directions were discussed in Chapter III, but they are repeated here for the purposes of clarity.

the subjects were asked to indicate which of the two children they would rather play with.

The choice of the like-sexed doll by a subject was defined as indicating a preference for a same-sexed playmate. The choice of the doll of the opposite sex was defined as indicating a preference for an opposite-sexed playmate.

TESTING PROCEDURE

The previously described instruments were administered to each of the one hundred subjects in private sessions lasting about twenty-five minutes. The testing was done during the months of November and December, 1964. Since the sex of the examiner could have influenced the subjects' responses, a female examiner tested all of the boys and a male examiner tested all of the girls. Both of the examiners were experienced elementary school teachers. Explicit instructions for administering each test and frequent consultations between the two examiners ensured that a standardized procedure was followed.

To prevent a test-by-order interaction, the order of administering the three major tests (ITSC, DAPT, TPT) was randomized for each subject. The randomization was done before any of the data were collected so that testing instruction sheets showing the order of administering the various tests to each subject could be prepared in advance.¹

¹See Appendix I.

For each subject the doll play interrogation with respect to the preferred sex-role and the choice of playmates was carried out immediately following the administration of the ITSC. This simplified the testing procedure and obscured its purposes as well, during the early stages of each session.

THE STATISTICAL ANALYSIS

Since the research hypotheses were stated in null form, two tailed tests were applied to the data. A confidence level of .05 was accepted as significant. The tests of significance used throughout the analysis are described in the following chapter.

The first subject for this investigation was the
of the industrial revolution and the change of situation
of the industrial revolution. The first subject was
the first. This subject is the first subject
of the industrial revolution. The first subject
of the industrial revolution is the first subject
of the industrial revolution.

THE INDUSTRIAL REVOLUTION

The first subject of the industrial revolution
was the first subject of the industrial revolution.
The first subject of the industrial revolution
was the first subject of the industrial revolution.
The first subject of the industrial revolution
was the first subject of the industrial revolution.
The first subject of the industrial revolution
was the first subject of the industrial revolution.
The first subject of the industrial revolution
was the first subject of the industrial revolution.

CHAPTER V

ANALYSIS AND RESULTS

SEX-ROLE PREFERENCE

Sex-Role Preference as Indicated by the It Scale for Children

The frequency distributions of ITSC scores by sex and SES are provided in Table V, while medians, means, and standard deviations calculated from the ungrouped data are shown in Table VI. The scores of boys were significantly less variable than those of girls ($F = 3.17$, $p < .01$), and they were concentrated at the upper end of the scale. (Twenty-nine of the fifty boys scored in the uppermost score interval). In contrast, the scores of girls were more variable and clustered at both scale extremities.

Since the distributions were extremely skewed, the variances for boys and girls were not equal, and the interval scale assumption appeared untenable, all eight hypotheses were evaluated by means of nonparametric tests of significance.

For hypotheses 1 and 2, the χ^2 one-sample test (Siegel, 1956, pp. 42-47) was used,¹ while hypotheses 3, 4, 5, 6, 7,

¹A more powerful test, the Kolmogorov-Smirnov one-sample test, would also have been suitable for evaluating hypotheses 1 and 2. However, the χ^2 test is more easily applied and it was sufficiently powerful to reject the null hypotheses.

TABLE V

FREQUENCY DISTRIBUTIONS OF ITSC SCORES FOR THE SAMPLE BY SEX AND BY
SEX AND SES

Class Interval	By Sex		Lower SES		Upper-Middle SES	
	Boys	Girls	Boys	Girls	Boys	Girls
80-84	29	5	10	3	19	2
75-79	8	1	6	-	2	1
70-74	3	3	3	3	-	-
65-69	4	1	3	-	1	1
60-64	1	2	-	1	1	1
55-59	1	2	1	-	-	2
50-54	-	-	-	-	-	-
45-49	-	2	-	2	-	-
40-44	1	-	-	-	1	-
35-39	-	-	-	-	-	-
30-34	-	1	-	1	-	-
25-29	-	2	-	1	-	1
20-24	1	2	1	1	-	1
15-19	1	1	1	1	-	-
10-14	-	4	-	1	-	3
5-9	1	6	-	2	1	4
0-4	-	18	-	9	-	9
Totals	50	50	25	25	25	25

TABLE 1

PERCENTAGE DISTRIBUTION OF THE TOTAL POPULATION BY SEX AND AGE GROUP

Age Group	Male	Female	Total	Male	Female	Total
0-4	10	10	20	10	10	20
5-9	10	10	20	10	10	20
10-14	10	10	20	10	10	20
15-19	10	10	20	10	10	20
20-24	10	10	20	10	10	20
25-29	10	10	20	10	10	20
30-34	10	10	20	10	10	20
35-39	10	10	20	10	10	20
40-44	10	10	20	10	10	20
45-49	10	10	20	10	10	20
50-54	10	10	20	10	10	20
55-59	10	10	20	10	10	20
60-64	10	10	20	10	10	20
65-69	10	10	20	10	10	20
70-74	10	10	20	10	10	20
75-79	10	10	20	10	10	20
80-84	10	10	20	10	10	20
85-89	10	10	20	10	10	20
90-94	10	10	20	10	10	20
95-99	10	10	20	10	10	20
100+	10	10	20	10	10	20
Total	100	100	200	100	100	200

TABLE VI

MEDIANS, MEANS, AND STANDARD DEVIATIONS OF ITSC SCORES FOR THE SAMPLE
BY SEX, BY SES, AND BY SEX AND SES

	N	Median	χ^2	Mean	S.D.
<u>By Sex</u>					
Boys	50	83.57	38.46*	74.72	17.25
Girls	50	11.83		27.06	30.73
<u>By SES</u>					
Lower SES	50	68.50	.04	51.02	33.18
Upper-Middle SES	50	66.50		50.76	35.73
<u>By Sex and SES</u>					
Lower SES Girls	25	15.00	.32	29.72	31.54
Upper-Middle SES Girls	25	8.38		24.40	29.66
Lower SES Boys	25	76.08	6.52*	72.32	17.31
Upper-Middle SES Boys	25	83.81		77.12	22.00
Total Sample	100	68.17		50.89	34.48

* Significant at the .05 level for a two-tailed test.

and 8 were tested by means of the median test (Ferguson, 1959, pp. 265-266). In the case of Hypotheses 7 and 8, Yate's correction for continuity was applied because some of the expected frequencies were small. The results were as follows:

Hypothesis 1, that the preferences of boys for the masculine sex role and the feminine sex role would not differ in strength, was rejected ($\chi^2 = 38.72$, $p < .001$).¹ The sex-role preferences of forty-seven boys were masculine (ITSC scores above forty-two), while only three were feminine (ITSC scores at or below forty-two); and the joint median and mean for boys was 83.57 and 74.22, respectively. Hence, the results support an alternate hypothesis, that boys are more masculine than feminine in sex-role preference.

Hypothesis 2, that the preferences of girls for the masculine sex role and the feminine sex role would not differ in strength, was also rejected ($\chi^2 = 6.48$, $p < .02$). The results, which signify that girls prefer the masculine sex role to the feminine, were contrary to theoretical expectation. Only sixteen of the fifty girls scored

¹ Throughout this chapter tables have been provided summarizing the raw score data, but the significance of differences for the various statistical tests in certain instances have not been included in the tables. Rather, a sufficiently complete description of the distributions of scores, the significance tests, and the levels of significance attained has been provided within the context of the discussion of the analyses and results.

feminine in sex-role preference (scores above forty-two), while thirty-four scored masculine (scores at or below forty-two).

Hypothesis 3, that the masculine sex-role preferences of boys and the feminine sex-role preferences of girls would not differ in strength, was also rejected ($\chi^2 = 38.46$, $p < .001$). The scores of forty boys, but only of nine girls, exceeded the joint median for both sexes¹ (68.17), indicating that boys are more masculine in sex-role preference than girls are feminine.

Hypothesis 4, that there would be no difference between lower SES children and upper-middle SES children in strength of preference for the appropriate sex role, was accepted ($\chi^2 = .04$, N.S.). Almost equal numbers of lower and upper-middle SES children scored above the joint median (twenty-five and twenty-four, respectively). These results were counter to the expectation that appropriate sex-role preferences would be stronger for lower socioeconomic subjects than for upper-middle socioeconomic status subjects.

¹Since the sample consisted of 100, it would be expected that the scores of 50 subjects, not 49, would fall on either side of the median. The apparent discrepancy results from the dichotomization of the discrete ungrouped scores into those which exceed the joint median and those which do not. This method is recommended by Siegel (1956, p. 112) for overcoming the difficulty which arises when scores fall right at the joint median.

In this instance, the scores of three subjects fell at sixty-eight, which is in the interval containing the joint median (interval, 67.5-68.5; median, 68.17). For purposes of the analysis all three scores were considered as falling below the joint median. If interpolation had been carried out only two scores, not three, would have been classified as

Hypothesis 5, that there would be no difference between lower SES boys and upper-middle SES boys in strength of preference for the masculine sex role, was rejected ($\chi^2 = 6.52, p < .02$). The observed difference was significant in the non-hypothesized direction. Upper-middle SES boys scored more masculine than those of lower SES. Of twenty-seven boys whose scores exceeded the joint median for boys (83.57), eighteen were of upper-middle SES, while only nine were of lower SES.

Hypothesis 6, that there would be no difference between lower SES girls and upper-middle SES girls in strength of preference for the feminine sex role, was accepted ($\chi^2 = .32, \text{N.S.}$). The scores of almost equal numbers of lower and upper-middle SES girls (fourteen and twelve, respectively) were above the joint median for girls (11.83). A difference in the direction of stronger feminine sex-role preference in lower SES girls had been anticipated.

Hypothesis 7, that the scores of boys who perceived "It" as female would not differ from those of boys who perceived "It" as male, was accepted ($\chi^2 = .14, \text{N.S.}$). Only

below the joint median, and fifty subjects would then have fallen above and below this point. However, the problem of which sex to assign to the subject considered as above the median would then have arisen. This decision would have affected the distribution within the contingency table.

This problem also arises in the evaluation of hypotheses 4, 5, 6, 7, and 8, and it is handled in an analogous manner.

four of fifty subjects gave "It" a female name, but of these three scored below the joint median for boys (83.57). Of the forty-six subjects who attributed a male name to "It", the scores of twenty-six exceeded the joint median, while twenty were at or below this point. Hence, contrary to theoretical expectation for boys, the perceived sex of "It" was independent of masculine or feminine sex-role preference. In this respect, the small number of subjects (four) who projected femininity into this drawing was a limiting factor.

Hypothesis 8, that the scores of girls who perceived "It" as female would not differ from those of girls who perceived "It" as male, was rejected ($\chi^2 = 12.15, p < .001$). All twelve girls who perceived "It" as female scored above the median for girls (11.83), but only fourteen of the thirty-eight girls who perceived "It" as male scored above this point. Hence, ITSC scores for girls were found to be strongly dependent upon the sex they attributed to the "It" figure.

Sex-Role Preference as Indicated by Doll Play Interrogation

Each of the one hundred subjects indicated a preference for the appropriate sex role.

Hypothesis 1, that there would be no difference between the number of boys manifesting masculine sex-role preference and the number of boys manifesting feminine

sex-role preference, was tested and rejected by means of the χ^2 one-sample test (Seigel, 1956, p. 42-47) ($\chi^2 = 50.00$, $p < .001$). The data strongly indicate that boys prefer the masculine sex role to the feminine.

Hypothesis 2, that there would be no difference between the number of girls manifesting masculine sex-role preference and the number of girls manifesting feminine sex-role preference, was tested in the same manner as hypothesis 1, and it was also rejected ($\chi^2 = 50.00$, $p < .001$). It is apparent from the data that girls prefer the feminine to the masculine sex role.

Hypotheses 3, 4, 5, and 6, all of which involve the comparisons of sample subgroups with respect to the number of subjects manifesting appropriate sex-role preference, were tested and confirmed by inspection of the data. Significant differences were not possible since there was no variability between the groups under comparison.

Relationships Between the Two Criteria of Sex-Role Preference

The hypotheses, which stated that there would be no significant relationship between the two criteria of sex-role preference (a) for lower SES boys, (b) for upper-middle SES boys, (c) for lower SES girls, or (d) for upper-middle SES girls, were all accepted. Since there

...the
... ..
... ..

... ..
... ..
... ..
... ..
... ..
... ..
... ..
... ..
... ..

... ..
... ..
... ..
... ..
... ..
... ..
... ..
... ..
... ..

Relationship between the
...

... ..
... ..
... ..
... ..
... ..
... ..
... ..
... ..
... ..

was no variability in the subjects' responses to questioning with respect to the preferred sex role, correlations with the ITSC scores were all zero.

Discussion of "Sex-Role Preference" Findings

Sex-Role Preference as Indicated by the "It" Scale for Children. A rigid pattern of masculine sex-role preference was characteristic of boys. More than three-quarters of them scored in the two upper-most score intervals (median = 83.57), and only three scored more feminine than masculine. Girls were more variable in their responses, but they too were distinguished by masculine sex-role preference, though to a lesser extent than boys. A stronger preference for the appropriate sex role by boys than girls was also common to all the ITSC studies reviewed in Chapter II in which sex differences were considered (Brown, 1956, 1957; Hartup and Zook, 1960; Clark, 1963a; Hall and Keith, 1964). The data from this study, however, confirm the view that the male role is actually preferred by girls. This finding cannot be evaluated in terms of the consensus in previous research, since in some of the above studies the results were not analyzed on this basis.

The theoretical expectation, that lower SES children would manifest stronger appropriate sex-role preferences than upper-middle SES children, was not confirmed. There

were no differences between the ITSC scores of the fifty lower SES subjects and the corresponding number of upper-middle SES children, nor between the scores of lower SES and upper-middle SES girls. Lower SES boys, however, were less masculine than their upper-middle SES counterparts. The latter finding is in contrast to the results of the Hall and Keith (1964) and Rabban (1950) studies in which lower SES boys were found to favor the masculine role to a stronger degree than middle SES boys. The reported independence of SES and sex-role preference for girls is supported by the one investigation (Hall and Keith, 1964), but disaffirmed by the other (Rabban, 1950).

Larger numbers of boys than girls gave the "It" figure a name consistent with their own sex (2 per cent and 24 per cent, respectively). For boys, the perceived sex of "It" was independent of masculine or feminine sex-role preference. For girls, masculine sex-role preference was associated with perceiving "It" as male. However, those girls who perceived "It" as female were less masculine than those who gave "It" a male name.

Sex-Role Preference as Indicated by Doll Play Interrogation.

No sex or socioeconomic status differences were anticipated or found. All of the subjects in the sample manifested appropriate sex-role preference when questioned with respect to the favored sex role. These results are in agreement

with those of previous investigators who have assessed sex-role preference by interrogation (Rabban, 1950; Kagan, 1956; Leftkowitz, 1962), but they deviate in certain respects from the findings from the ITSC. In the case of boys, a rigid pattern of masculine sex-role preference was indicated by the data from both tests, but stronger appropriate sex-role preferences of upper-middle SES boys than lower SES boys was limited to the ITSC results. The data from interrogation with respect to the preferred sex-role support the view that the female role is as attractive to girls as masculine role to boys. However, on the basis of the ITSC, the preferences of girls for the appropriate sex-role were not as strong as those of boys.

Relationships Between the Two Criteria of Sex-Role Preference. No relationships between the ITSC scores and those from doll play interrogation with respect to the preferred sex role were anticipated or found for lower SES boys, upper-middle SES boys, lower SES girls, or upper-middle SES girls. These findings are subject to at least two interpretations. It is possible that sex-role preference is a multi-dimensional phenomenon and that the two instruments under consideration measure different components. Certainly those researchers who have based their studies of sex-role preference on the ITSC scores and those who have operationally defined sex-role preference as a subject's response

when he is asked which role he prefers, have made different assumptions about the nature of this variable. The former have assumed that there are degrees of sex-role preference. For example, it is implicit in the ITSC that a subject can be equally attracted to each sex role, or more attracted to one sex role than to the other. However, the latter investigators have assumed that sex-role preference is a discontinuous variable. In this procedure, it is taken for granted that sex-role preference is dichotomous; a subject either prefers one sex role or the other, and it is not possible to be equally attracted to the masculine and feminine sex roles.

It seems more likely, however, that the lack of relationship between the scores of subjects on these two tests simply indicates that these are not equally valid indices of sex-role preference. Since it is apparent that they both do not assess the same hypothetical construct, the validity of each is placed in doubt. As an indication of sex-role preference, direct questioning of children with respect to the favored sex role is subject to two criticisms. It seems plausible that children's responses merely reflect conformity to peer and parental expectations and pressures, rather than their own sex-role preferences, since they are readily aware that expressions of sex-appropriate behavior are more likely to evoke social

approval than expressions of sex-inappropriate behavior. (Data to be presented later shows that both boys and girls perceive their parents as favoring appropriate sex-role adoption.) This means of assessing sex-role preference may also be criticized on the basis that it amounts to a one-item test which has no proven validity or reliability.

The ITSC appears to be a more promising indicator of sex-role preference than direct interrogation. The former is a projective measure which is constructed to overcome the social desirability factor in responses by focussing the entire testing situation on the "It" figure. The underlying assumption that sex-role preference is a continuous variable is sound. The retest reliability of the ITSC has been demonstrated. Furthermore, evidence from this study indicates it has more construct validity than interrogation with respect to the preferred sex role. The utilization of the "It" figure as the projective stimulus in this test, however, is problematic. It is apparent that once a subject has identified the "It" figure by sex, either through projecting femininity into "It", or on the basis of the fact that sexually ambiguous human figure drawings tend to be perceived as male in our society, his subsequent ITSC score is to a certain extent predetermined.

SEX-ROLE IDENTIFICATION

Percentages of the sample by sex, by SES, and by sex

and SES drawing the same-sexed figure first, drawing the same-sexed figure larger, and sexually differentiating between the male and female figures are provided in Table VII. On the basis of these data hypotheses 1(a), 1(b), 1(b), 2(a), 2(b), and 2(c) were tested by means of the χ^2 one sample test, while the remainder of the sex-role identification hypotheses were evaluated by the χ^2 test for the significance of the difference between independent proportions.¹ Values of χ^2 for hypotheses three to eight are included in Table VII.

Hypotheses 1(a) and 1(c), which stated that there would be no difference between the number of boys identified with the masculine sex role and the number of boys identified with the feminine sex-role as indicated by the number of them drawing the same-sexed figure first and the number differentiating between the male and female figures, were rejected. The χ^2 values were 6.48 ($p < .02$) and 20.48 ($p < .001$), respectively. Hypothesis 1(b), based on the relative sizes of the human figure drawings, was confirmed ($\chi^2 = 2.88$. N.S.). The data for hypothesis 1(a) and 1(c) support the alternate hypothesis, that more boys are identified with the male than with the female sex-role. The

¹Here, and in the analysis of playmate preferences, this test was selected instead of the more powerful Fisher Exact Probability Test. The Fisher Test would have been computationally impractical considering the sample sizes and the nature of the distributions of frequencies within the contingency tables.

TABLE VII

PERCENTAGES OF THE SAMPLE BY SEX, BY SES, AND BY SEX AND SES DRAWING THE SAME SEXED FIGURE FIRST, DRAWING THE SAME-SEXED FIGURE LARGER, AND SEXUALLY DIFFERENTIATING BETWEEN THE MALE AND FEMALE FIGURES ON THE DRAW-A-PERSON TEST

	N	Percentage Drawing Same-Sexed Figure First	χ^2	Percentage Drawing Same-Sexed Figure Larger	χ^2	Percentage Differ- entiating Sexes in Drawings	χ^2
<u>By Sex</u>							
Boys	50	68%	3.51	38%	6.76*	82%	1.33
Girls	50	84%		64%		90%	
<u>By SES</u>							
Lower SES	50	82%	1.97	48%	.36	84%	33
Upper-Middle SES	50	70%		54%		88%	
<u>By Sex and SES</u>							
Lower SES Girls	25	88%	.60	60%	.35	84%	2.00
Upper-Middle SES Girls	25	80%		68%		96%	
Lower SES Boys	25	76%	1.47	36%	.08	84%	.14
Upper-Middle SES Boys	25	60%		40%		80%	
Total Sample	100	76%		51%		86%	

*Significant at the .05 level for a two-tailed test.

results for hypothesis 1(b) were not anticipated.

Hypothesis 2(a), 2(b), and 2(c), which stated that there would be no difference between the numbers of girls identified with the masculine sex role and the number of girls identified with the feminine sex role were all rejected. The observed values of χ^2 were 23.12 ($p < .001$), 3.92 ($p < .05$) and 32.00 ($p < .001$), respectively. The differences were in the same direction for all three hypotheses, indicating that larger numbers of girls manifest identification with the feminine sex role than with the masculine.

Sex differences in sex-role identification were all in the expected direction. Larger percentages of girls than boys drew the same-sexed figure first, drew the same-sexed figure larger, and differentiated between the two human figures. The differences were significant, however, only for hypothesis 3(b) ($\chi^2 = 6.76$, $p < .01$), which was based on the numbers of boys and girls drawing the same-sexed figure larger.

Hypotheses 4(a), 4(b), and 4(c), which stated that there would be no difference between lower SES children and upper-middle SES children in strength of preference for the appropriate sex role, were all accepted.

Hypotheses 5(a), 5(b), and 5(c), which stated that the numbers of boys of lower SES and upper-middle SES who were identified with the masculine sex role would not differ,

were all accepted. The differences between the numbers of lower SES boys and upper-middle SES boys drawing the male figure first, drawing the male figure larger, and sexually differentiating between the male and female figures were not significant. Differences in the direction of larger numbers of lower SES boys than upper-middle SES boys being identified with the masculine sex role were expected.

Hypotheses 6(a), 6(b), and 6(c), which stated that the numbers of girls of lower SES and upper-middle SES who were identified with the feminine sex role would not differ, were all accepted. The proportion of girls in these two SES classifications who were identified with the feminine sex role did not differ. It had been anticipated that a larger proportion of lower SES girls than upper-middle SES girls would manifest an identification with the feminine sex role.

Relationships Among the Three Criteria of Sex-Role Identification

Contingency coefficients were appropriate for determining the relationships among the three DAPT criteria of sex-role identification, since the data were in dichotomous form. Values of C were calculated separately for lower SES boys, lower SES girls, upper-middle SES boys, and upper-middle SES girls. The method of Ferguson (1949, pp. 194-196)

was used. Since in each case the expected cell frequencies were small, it was necessary to apply Yate's correction for continuity in calculating the associated values of χ^2 . Values of C are given in Tables XI and XII.

Hypotheses 1(a) and 1(c), which stated that there would be no significant relationships among the three criteria of sex-role identification for lower SES boys and lower SES girls, respectively, were both accepted. In the cases of upper-middle SES boys and girls, (hypotheses 1(b) and 1(d), respectively), there was one significant correlation for each group. Of the former, those who drew the male figure first tended to differentiate between the two human figures, while those who drew the female figure first did not ($C = .45$). Drawing the feminine and masculine figures first was respectively associated with drawing the feminine and masculine figures larger ($C = .38$), for upper-middle SES girls.

Discussion of "Sex-Role Identification" Findings

The preponderance of evidence indicated that children of both sexes had identified with the appropriate sex role. The data suggest, however, that same-sex identification at this age may be more characteristic of girls than boys. The observed sex differences were in this direction for all three DAPT characteristics, but significantly so for only sex of the larger-drawn figure.

The data indicating that boys and girls do not differ significantly in their tendencies to draw the like-sexed human figure first is consistent with previous research. In three studies reviewed in Chapter II (Weidner and Noller, 1950, 1953; Lynn and Sawrey, 1959) it was reported that larger proportions of girls than boys drew the like-sexed figure first. In two equivalent studies (Jolles, 1952; Butler and Marcuse, 1959), however, results were in the direction of larger proportions of boys than girls first drawing the like-sexed figure.

The finding that larger numbers of girls than boys draw the same-sexed figure larger is congruent with the two previous studies of this variable reviewed earlier (Weidner and Noller, 1950, 1953).

In previous research it has been found that greater sexual differentiation between the two human figure drawings is more characteristic of girls than boys (Swensen and Newton, 1955). Results from this investigation were in the same direction, but not significantly. The lack of refinement in the rating procedure may account for the nonsignificant results. In this thesis, judges' ratings were dichotomous: differentiated or undifferentiated. The ratings in the Swensen and Newton (1955) investigation were more refined (a nine point scale), and hence more sensitive to differences.

There were no significant differences in sex-role identification between the samples of lower and upper-middle SES children. This was contrary to the expectation that more of the former than of the upper-middle SES children would have manifested appropriate sex-role identification.

Evidence from this study suggests that the sex of the first-drawn figure, the sex of the larger drawn figure, and the presence or absence of sexual differentiation between the human figure drawings measure different behavioral phenomena. Of the twelve contingency coefficients calculated for the four different sex and SES groups, only two were significant. It is not possible to conclude from these findings which of the three DAPT characteristics is most valid as an indicator of sex-role identification.

CHILDREN'S PERCEPTIONS OF PARENTAL PREFERENCES FOR SEX-ROLE ADOPTION

The frequency distributions of TPT scores are provided in Table VIII, while means and standard deviations calculated from the ungrouped scores are shown in Table IX.

Hypotheses 1, 2, and 3 were tested by means of the χ^2 one-sample test applied to two by two tables.¹ Under

¹The Kolmogorov-Smirnov one-sample test, which is more powerful than the χ^2 one-sample test, would have been equally suitable for evaluating these hypotheses since the distributions are continuous. However, upon inspection of the data it was apparent that the χ^2 test would be sufficiently powerful to reject the null hypotheses.

TABLE VIII

FREQUENCY DISTRIBUTIONS OF TOY PREFERENCE TEST SCORES FOR THE SAMPLE BY
SEX, AND BY SEX AND SES

Class Interval	By Sex		Lower SES		Upper-Middle SES	
	Boys	Girls	Boys	Girls	Boys	Girls
39-40	3	1	0	0	3	1
37-38	7	0	1	0	6	0
35-36	4	5	1	1	3	4
33-34	7	5	5	4	2	1
31-32	6	6	3	2	3	4
29-30	4	10	1	6	3	4
27-28	9	8	7	5	2	3
25-26	8	6	5	2	3	4
23-24	0	7	0	4	0	3
21-22	1	1	1	1	0	0
19-20	1	0	1	0	0	0
17-18	0	1	0	0	0	1
Totals	50	50	25	25	25	25

TABLE IX

MEANS AND STANDARD DEVIATIONS OF TOY PREFERENCE TEST SCORES FOR THE SAMPLE
BY SEX, BY SEX, AND BY SEX AND SES

	N	Mean	S.D.	t
<u>By Sex</u>				
Boys	50	31.14	4.88	2.43*
Girls	50	28.90	4.31	
<u>By SES</u>				
Lower SES	50	28.82	3.96	2.62*
Upper-Middle SES	50	31.22	5.12	
<u>By Sex and SES</u>				
Lower SES Girls	25	28.64	3.62	.43
Upper-Middle SES Girls	25	29.16	4.89	
Lower SES Boys	25	29.00	4.27	3.45*
Upper-Middle SES Boys	25	33.28	4.49	
Total Sample	100	30.02	4.74	

* Significant at the .05 level of better for a two-tailed test.

the null hypotheses it was assumed that equal numbers of subjects would perceive their parents as preferring appropriate sex-role adoption (TPT scores above 24), and inappropriate sex-role adoption (TPT scores at or below 24).

Hypotheses 4, 5, 6, and 7 were evaluated by means of the "t" test for the significance of difference between means for independent samples (Winer, 1962, pp. 24-31). Preliminary tests for homogeneity of variance were carried out ($\alpha = .10$) using the method of Winer (1962, pp. 33-36). One minor departure from homogeneity was found. In hypothesis 5 the observed value of F was 1.67, while the critical value was 1.61. However, "the 't' test is robust with respect to moderate departures from the hypothesis of homogeneity of variance" (Winer, 1962, p. 33.).

Hypothesis 1, which stated that children would perceive the preference of their parents for masculine sex-role adoption and feminine sex-role adoption as not differing in strength, was rejected ($\chi^2 = 60.84, p < .001$). The evidence indicates that children perceive their parents as preferring sex-appropriate to sex-inappropriate sex-role adoption.

Hypothesis 2, that boys would perceive the preferences of their parents for masculine sex-role adoption and feminine sex-role adoption as not differing in strength, was rejected ($\chi^2 = 42.32, p < .001$). The data strongly support an alternate hypothesis, that boys perceive their

parents as preferring masculine sex-role adoption to feminine sex-role adoption.

Hypothesis 3, that girls would perceive the preferences of their parents for masculine sex-role adoption and feminine sex-role adoption as not differing in strength, was rejected ($\chi^2 = 20.48$, $p < .001$). The results indicate that girls perceive their parents as preferring feminine sex-role adoption to masculine sex-role adoption.

Hypothesis 4, that boys' perceptions of the strength of their parents' preferences for masculine sex-role adoption would not differ from girls' perceptions of the strength of their parents' preferences for feminine sex-role adoption, was rejected ($t = 2.43$, $p < .02$). The results reveal that boys perceive their parents as favoring appropriate sex-role adoption to a stronger degree than do girls.

Hypothesis 5, that lower SES children's perceptions of the strength of their parents' preferences for appropriate sex-role adoption would not differ from those of upper-middle SES children, was rejected ($t = 2.62$, $p < .02$). The data support an alternate hypothesis, that upper-middle SES children perceive their parents as preferring appropriate sex-role adoption to a stronger degree than lower SES children. This difference was in the nonhypothesized direction.

Hypothesis 6, that lower SES girls' perceptions of

the strength of their parents' preferences for feminine sex-role adoption would not differ from those of upper-middle SES girls, was accepted ($t = .43$. N.S.). This was contrary to the expectation that lower SES girls would perceive their parents as preferring appropriate sex-role adoption to a stronger degree than their upper-middle SES counterparts.

Hypothesis 7, that lower SES boys' perceptions of the strength of their parents' preferences for masculine sex-role adoption would not differ from those of upper-middle SES boys, was rejected ($t = 3.45$, $p < .01$). An alternate hypothesis, that upper-middle SES boys perceive their parents as favoring masculine sex-role adoption to a stronger degree than lower SES boys, is supported. This finding runs counter to the anticipated results.

Discussion of Findings for "Children's Perceptions of Parental Preferences for Sex-Role Adoptions"

The results reveal that children of both sexes perceive their parents as preferring the adoption of appropriate sex-role behavior. This tendency was found to be stronger for boys than girls. Therefore, to the extent that parental preferences for sex-role adoption, as perceived by children, correspond to parental sex-typing practices, it may be asserted that children of both sexes

regard themselves as being urged to behave in a manner suitable to their sex, and that boys perceive themselves as being subject to stronger parental control than girls. Hence, the findings substantiate the view that boys are under greater parental pressure for masculine sex-role adoption, than are girls for feminine sex-role adoption, and that girls are allowed more flexibility and latitude in what behavior is adopted.

The data are in agreement with the Fauls and Smith (1956) findings, since in both studies it was found that children of both sexes perceive their parents as favoring appropriate sex-role adoption. However, sex differences were not evident in the Fauls and Smith research, but were established in this study. The limitations of the former were pointed out in Chapter II.

SES differences are also apparent from the analysis. Upper-middle SES children perceived their parents as favoring appropriate sex-role adoption to a stronger degree than lower SES children. However, since the lower SES boys and girls did not differ significantly, the overall SES results are obviously attributable to the differences between upper-middle SES boys and girls. Hence, the theoretical expectation of stronger parental pressures for the adoption of appropriate sex-role behavior in lower SES groups was contradicted. Further discussion of these findings is deferred to the following chapter in order that they may be considered

in relation to the results of the other aspects of sex-role learning investigated.

The modification of the Toy Test used in this study proved to be a promising indicator of children's perceptions of parental preferences for sex-role adoption. The sex differences reported were in accord with theoretical expectations, and the socioeconomic status differences were in the direction that would be anticipated, considering the SES distinctions found for the other aspects of sex-role learning. The directions for administering this test proved to be adequate and the frequency distributions of childrens' scores appeared to approximate normal distributions. The reliability of the TPT, as modified for use in this study, is yet to be demonstrated, however.

CHOICE OF PLAYMATES

The percentages of subjects in the various sample groupings favoring like-sexed playmates are shown in Table X.

Hypotheses 1, 2, and 3 were evaluated by means of the χ^2 one-sample test (Siegel, 1956, pp. 42-47). Hypotheses 4, 5, 6, and 7 were tested with the χ^2 test for the significance of difference between independent proportions (Ferguson, 1959, pp. 169-171). The results were as follows:

Hypothesis 1, that the number of children manifesting preferences for like-sexed playmates would not differ from

TABLE X

PREFERENCES OF SUBJECTS FOR LIKE-SEXED AND OPPOSITE-SEXES PLAYMATES BY
SEX, BY SES, AND BY SEX AND SES

	N	Like-Sexed	Opposite-Sexed	χ^2
<u>By Sex</u>				
Boys	50	72%	28%	1.13
Girls	50	62%	38%	
<u>By SES</u>				
Lower SES	50	56%	44%	5.47*
Upper-Middle SES	50	78%	22%	
<u>By Sex and SES</u>				
Lower SES Girls	25	52%	48%	2.12
Upper-Middle SES Girls	25	72%	28%	
Lower SES Boys	25	60%	40%	3.57
Upper-Middle SES Boys	25	84%	16%	
<u>Total Sample</u>	100	67%	33%	

*Significant at the .05 level or better for a two-tailed test.

the number of children manifesting preferences for opposite sexed playmates, was rejected ($\chi^2 = 11.56$, $p < .001$). The data support an alternate hypothesis, that more children prefer like-sexed than prefer opposite-sexed playmates.

Hypothesis 2, that the number of boys manifesting preferences for male playmates would not differ from the number of boys manifesting preferences for female playmates, was also rejected ($\chi^2 = 9.68$, $p < .01$). The data support an alternate hypothesis, that more boys prefer a male playmate than prefer a female playmate.

Hypothesis 3, that the number of girls manifesting preferences for male playmates would not differ from the number of girls manifesting preferences for female playmates, was accepted ($\chi^2 = 2.88$, $p < .10$).

Hypothesis 4, that the number of boys manifesting preferences for male playmates would not differ from the number of girls manifesting preferences for female playmates, was accepted ($\chi^2 = 1.13$, N.S.).

Hypothesis 5, that the number of children of lower SES and upper-middle SES manifesting preferences for like-sexed playmates would not differ, was rejected ($\chi^2 = 5.47$, $p < .02$). The data support an alternate hypothesis, that more upper-middle SES children than lower SES children prefer like-sexed playmates.

Hypothesis 6, that the number of boys of lower SES and the number of boys of upper - middle SES

manifesting preferences for male playmates would not differ, was accepted ($\chi^2 = 3.57, p < .10$).

Hypothesis 7, that the number of girls of lower SES and upper-middle SES manifesting preferences for female playmates would not differ, was accepted ($\chi^2 = 2.12, N.S.$).

The results for hypotheses 1 and 2 were anticipated. The findings for hypotheses three through seven were contrary to theoretical expectations.

Discussion of "Choice of Playmates" Findings

The results indicate that boys prefer like-sexed playmates, but girls do not, at this stage of development. Sex differences in this direction were anticipated on the basis of the greater latitude in sex-role adoption allowed girls than boys. However, it had not been expected that girls' playmate preferences would be undifferentiated. This finding is contrary to the results of previous research.

Socioeconomic status differences in preferences of children for like-sexed playmates were revealed. Although in the separate comparisons of lower and upper-middle SES boys and lower and upper-middle SES girls, there were no significant differences in playmate preferences, the results were significant when the choices of lower SES children of both sexes were compared with those of upper-middle SES children of both sexes. The postulate that lower socioeconomic status membership facilitates the acquisition of

preferences for like-sexed playmates was contradicted. Rather it was found that a larger number of upper-middle SES children than lower SES children preferred like-sexed playmates.

RELATIONSHIPS AMONG THE VARIOUS CRITERIA OF SEX-ROLE LEARNING

Correlations among the seven tests of sex-role learning were calculated separately for boys and girls of lower SES and upper-middle SES. These correlation matrices are shown in Tables XI and XII. Contingency coefficients (C) were calculated to determine the relationships between dichotomous variables. The method of Ferguson (1959, pp. 194-196) was used. Since in each case the expected cell frequencies were small, it was necessary to apply Yate's correction for continuity throughout in calculating the associated values of χ^2 . Point biserial correlation coefficients (r_{pbi}) were computed to determine the relationships between continuous and dichotomous variables. The procedure given in Ferguson (1959, pp. 199-202) was applied to the ungrouped data. The relationships between continuous variables were determined by calculating Pearson product moment correlations (r).

Tables XI and XII provide little evidence to reject the hypothesis that there would be no significant

CORRELATIONS AMONG THE THREE TESTS OF SEX-ROLE IDENTIFICATION; CORRELATIONS BETWEEN THE TWO TESTS OF SEX-ROLE PREFERENCE; AND CORRELATIONS AMONG THE TESTS OF SEX-ROLE IDENTIFICATION, SEX-ROLE PREFERENCE, CHOICE OF PLAYMATES, AND CHILDREN'S PERCEPTIONS OF PARENTAL PREFERENCES FOR SEX-ROLE ADOPTION FOR LOWER SES BOYS AND UPPER-MIDDLE SES BOYS

Sex-Role Identification			Sex-Role Preference		Choice of Playmates		Children's Perceptions of Parental Preference for Sex-Role Adoption	
Sex of First Drawn	Sex of Larger Drawn	Sexual Differentiation	Preferred Sex-Role	ITSC	Preferred Playmates	TPT		
(1) Lower SES	(2) C=.25	(3) C=.35	(4) C=.00	(5) r pbi=.28	(6) C=.21	(7) r pbi=-.13		
Upper-Middle SES	C=.08	C=.45 *	C=.00	r pbi=.02	C=.20	r pbi=-.40*		
(2)	Lower SES	C=.00	C=.00	r pbi=-.45 *	C=.00	r pbi=.00		
	Upper-Middle SES	C=.10	C=.00	r pbi=-.06	C=.00	r pbi=.09		
	(3)	Lower SES	C=.00	r pbi=.32	C=.42 *	r pbi=.13		
		Upper-Middle SES	C=.00	r pbi=-.06	C=.33	r pbi=.45 *		
		(4)	Lower SES	r pbi=.00	C=.00	r pbi=.00		
			Upper-Middle SES	r pbi=.00	C=.00	r pbi=.00		
			(5)	Lower SES	r pbi=-.23	r=-.10		
				Upper-Middle SES	r pbi=-.02	r=-.19		
				(6)	Lower SES	r pbi=.00		
					Upper-Middle SES	r pbi=.08		
					(7)	-----		

*Significant at the .05 level or better for a two-tailed test.

TABLE XII

CORRELATIONS AMONG THE THREE TESTS OF SEX-ROLE IDENTIFICATION; CORRELATIONS BETWEEN THE TWO TESTS OF SEX-ROLE PREFERENCE; AND CORRELATIONS AMONG THE TESTS OF SEX-ROLE IDENTIFICATION, SEX-ROLE PREFERENCE, CHOICE OF PLAYMATES, AND CHILDREN'S PERCEPTIONS OF PARENTAL PREFERENCES FOR SEX-ROLE ADOPTION FOR LOWER SES GIRLS AND UPPER-MIDDLE SES GIRLS

Sex-Role Identification		Sex-Role Preference		Choice of Playmates		Children's Perceptions of Parental Preferences for Sex-Role Adoption	
Sex of First Sex Drawn	Sex of Larger Drawn	Sexual Diff-erentiation	Preferred Sex-Role	ITSC	Preferred Playmates	TPT	
(1) Lower SES	(2) C=.08	(3) C=.01	(4) C=.00	(5) rpb _i =-.25	(6) C=.22	(7) rpb _i =-.14	
Upper-Middle SES	C=.38*	C=.15	C=.00	rpb _i =-.04	C=.06	rpb _i =-.09	
(2)	Lower SES	C=.20	C=.00	rpb _i =.01	C=.05	rpb _i =-.01	
	Upper-Middle SES	C=.08	C=.00	rpb _i =-.16	C=.14	rpb _i =-.21	
	(3)	Lower SES	C=.00	rpb _i =-.19	C=.33	rpb _i =.05	
		Upper-Middle SES	C=.00	rpb _i =-.36	C=.10	rpb _i =.13	
		(4)	Lower SES	rpb _i =.00	C=.00	rpb _i =.00	
			Upper-Middle SES	rpb _i =.00	C=.00	rpb _i =.00	
			(5)	Lower SES	rpb _i =.02	r=-.15	
				Upper-Middle SES	rpb _i =-.21	r=-.29	
				(6)	Lower SES	rpb _i =.24	
					Upper-Middle SES	rpb _i =.06	
					(7)	-----	

*Significant at the .05 level or better for a two-tailed test.

relationships among the tests of sex-role identification, sex-role preference, choice of playmates, and children's perceptions of parental preferences for sex-role adoption. There were no significant correlations for either lower SES or upper-middle SES girls. Only two significant relationships for lower SES boys and two for upper-middle SES boys were found.

For lower SES boys, those who drew the masculine figure larger scored lower on the ITSC than those who drew the female figure larger ($r_{pbi} = -.45$). Differentiation between the male and female figures on the Draw-A-Person Test was associated with the choice of a female playmate, while non-differentiation was associated with the choice of a male playmate ($C = .42$).

For upper-middle SES boys, those who drew the masculine figure first perceived their parents as desiring appropriate sex-role adoption to a lesser extent than those who drew the female figure first ($r_{pbi} = -.40$). Upper-middle SES boys who differentiated between the two DAPT human figure drawings perceived their parents as preferring appropriate sex-role adoption more strongly than those who did not differentiate ($r_{pbi} = .45$).

Discussion of "Relationships Among the Various Criteria of Sex-Role Learning"

On theoretical grounds it was expected that the various

aspects of sex-role learning would complement one another. Specifically, it was anticipated that appropriate sex-role preference would facilitate appropriate sex-role identification, that masculine and feminine sex-role identification would be reinforced by the voluntary choice of male and female playmates, that children who perceived their parents as favoring appropriate sex-role adoption would be more likely to manifest appropriate sex-role preference, appropriate sex-role identification and a preference for like-sexed playmates than those who did not, and that children who preferred the masculine and feminine sex roles would respectively prefer male and female playmates.

The data did not support the views in the preceding paragraph. The number of significant correlations in Tables XI and XII is not much larger than would be expected by chance, and many of the relationships are in a negative direction. To the extent that the measurement techniques employed are valid for the purposes for which they were used, these results may be interpreted as indicating that the development of appropriate sex-role identification, the establishment of an appropriate sex-role preference, the acquisition of a preference for like-sexed playmates, and the attainment of a realization that the parents prefer appropriate sex-role adoption are non-complementary and develop independently. Hence, for example, it may not be

possible to accurately predict a child's sex-role preference when one knows his preference for masculine or feminine playmates.

INTELLIGENCE AS A VARIABLE IN SEX-ROLE LEARNING

In this study intelligence was considered only as a sampling criterion and not treated as an independent variable in the analysis. However, since Detroit I.Q.'s were available along with the sex-role learning data, relationships were determined. Intercorrelations between Detroit I.Q.'s and the seven criteria of sex-role learning as well as sex of the "It" figure, were computed separately for boys and girls of lower SES and upper-middle SES. Point biserial correlation coefficients (r_{pbi}) were calculated to determine the relationships between discrete variables and continuous variables. Pearson product moment correlation coefficients (r) were computed for continuous variables. The results are summarized in Table XIII.

Only two of the twenty-eight relationships between Detroit I.Q.'s and the seven criteria of sex-role learning were significant. This number is not much greater than would be expected by chance. None of the correlations of intelligence quotient with sex attributed to the "It"

TABLE XIII

CORRELATIONS OF DETROIT DEVIATION I.Q.'S WITH SEX-ROLE LEARNING VARIABLES FOR LOWER SES BOYS, LOWER SES GIRLS, UPPER-MIDDLE SES GIRLS, AND UPPER-MIDDLE SES BOYS

Sex-Role Learning Variable	Lower SES Boys	Lower SES Girls	Upper-Middle SES Boys	Upper-Middle SES Girls
<u>Sex-Role Preference</u>				
1. ITSC	$r = .14$	$r = -.23$	$r = -.17$	$r = -.28$
2. Sex of "It" Figure	$r_{pbi} = .06$	$r_{pbi} = -.29$	$r_{pbi} = -.24$	$r_{pbi} = -.27$
3. Doll Play Interrogation	$r_{pbi} = .00$	$r_{pbi} = .00$	$r_{pbi} = .00$	$r_{pbi} = .00$
<u>Sex-Role Identification</u>				
1. DAPT First Drawn Figure	$r_{pbi} = -.45^*$	$r_{pbi} = .11$	$r_{pbi} = .11$	$r_{pbi} = -.25$
2. DAPT Larger Drawn Figure	$r_{pbi} = .03$	$r_{pbi} = -.09$	$r_{pbi} = .13$	$r_{pbi} = .17$
3. DAPT Sexual Differentiation	$r_{pbi} = .20$	$r_{pbi} = .26$	$r_{pbi} = .34$	$r_{pbi} = .13$
<u>Children's Perceptions of Parental Preferences for Sex-Role Adoption</u>				
1. TPT	$r = .02$	$r = -.07$	$r = -.07$	$r = .10$
<u>Choice of Playmates</u>				
1. Doll Play Interrogation	$r_{pbi} = -.24$	$r_{pbi} = -.09$	$r_{pbi} = .03$	$r_{pbi} = -.46^*$

* Significant at the .05 level for a two-tailed test.

figure were significant. From the data in Table XIII the following may be concluded:

1. In this study, between-group differences in the various aspects of sex-role learning were not the result of between-group differences in intelligence quotient.

2. The perceived sex of the "It" figure on the ITSC may be independent of intelligence quotient for both boys and girls.

3. Intelligence quotient may not be a variable in sex-role learning for non-retarded children.

CHAPTER VI

SUMMARY, CONCLUSIONS, AND IMPLICATIONS

SUMMARY AND CONCLUSIONS

In this thesis sex and socioeconomic status differences in four aspects of sex-role learning were investigated. The dependent variables and measurement procedures were as follows: (1) sex-role preference, as indicated by (a) The It Scale for Children (Brown, 1956) and (b) doll play interrogation with respect to the preferred sex role; (2) sex-role identification as evidenced by the Draw-A-Person Test (Machover, 1949) scored on the basis of (a) sex of the first drawn figure, (b) sex of the larger drawn figure, and (c) sexual differentiation between the two human figures; (3) children's perceptions of parental preferences for sex-role adoption, as indicated by a modification of the Toy Preference Test (DeLucia, 1963); and (4) children's preferences for masculine or feminine playmates, as revealed by doll play interrogation.

Since the measurement procedures in this area of personality have received little research attention, the construct and concurrent validity of the above instruments was an additional concern. The interrelatedness of the four dependent variables was also investigated.

The sample comprised one hundred Grade I students: twenty-five boys and twenty-five girls of lower SES, and equal number of boys and girls of upper-middle SES.

The instruments were administered to each subject in a private session about twenty-five minutes long. A female examiner tested the boys and a male examiner tested the girls.

Sex Differences

The boys in the sample were characterized by a rigid pattern of masculine sex-role preference. All of them indicated a preference to be male when questioned with respect to the preferred sex role and the majority of them scored in the uppermost score interval of the ITSC. The results from two of the three tests of sex-role identification revealed that larger numbers of boys were identified with the masculine than with the feminine sex role. It was also found that boys preferred masculine to feminine playmates and perceived their parents as favoring appropriate sex-role adoption.

For girls, the findings from the two criteria of sex-role preference were in contrast. The data from interrogation with respect to the preferred sex role signified that the preferences of girls for the feminine sex role were equally as strong as those of boys for the masculine sex role. However, girls' preferences for the appropriate

sex role were not as strong as those of boys on the basis of the ITSC scores. Indeed, it was found that girls also preferred the masculine sex role, but to a lesser extent than boys. Results of the DAPT reveal, however, that girls' unconscious identifications are feminine even though they may consciously prefer the masculine role. The girls, as well as the boys, perceived their parents as preferring appropriate sex-role adoption, but this tendency was not as strong for the former. The boys and girls also differed in playmate preferences. Preference for like-sexed playmates was characteristic only of the boys.

The data from the ITSC may be interpreted as supporting the view that such factors as the greater prestige associated with the male role, the flexibility in sex-role adoption allowed girls but not boys, discontentment of mothers with their sex roles, and similarities in attire, names, and toys for boys and girls contribute to the acquisition of masculine sex-role preferences by children of both sexes. The finding, that boys perceive their parents as favoring appropriate sex-role adoption to a stronger degree than do girls, also adds validity to the position that boys are under stronger sex-typing pressures than girls and are allowed less latitude in their sex-role adoption.

That boys are not firmly identified with the masculine sex role but manifest a strong preference for it, could signify that they are compulsively masculine. They

may display exaggerated tendencies in the direction of masculinity in part because they sense the less favored position of females in our society and in part because they may be less firmly identified with the appropriate sex role than girls. This interpretation is consistent with the evidence indicating that boys prefer like-sexed playmates, but girls do not.

Socioeconomic Status Differences

The fifty lower SES subjects and the fifty children of upper-middle socioeconomic status did not differ in their preferences for the appropriate sex role as indicated by interrogation with respect to the preferred sex role, in their preferences for the appropriate sex role as indicated by the ITSC, in their preferences for like-sexed playmates, or in terms of the number of each group manifesting identification with the appropriate sex role. Upper-middle SES children, however, perceived their parents as preferring appropriate sex-role adoption to a stronger degree than lower SES subjects. This difference was largely attributable to the large variation between lower and upper-middle SES boys.

None of the tests of sex-role learning differentiated between lower and upper-middle SES girls. Hence, the results would indicate that lower socioeconomic status girls are not

at an advantage, as hypothesized, but rather that there is an equalization of facilitating factors contributing to the learning of appropriate sex-role behavior by these two groups. To the extent that parental preferences for sex-role adoption as perceived by children correspond to child rearing practices of parents, the results signify that girls of lower socioeconomic status are not under stronger parental pressure for feminine sex-role adoption than their upper-middle socioeconomic status counterparts. Rather, the findings indicate that parents of upper-middle socioeconomic status and lower socioeconomic status encourage feminine sex-role adoption to the same extent. This may serve as a balancing influence in the sex-role learning of girls from these two subcultures.

In the case of boys, the significant differences were all in the direction of earlier masculine sex-role learning by those of upper-middle SES. The former scored more masculine on the ITSC and perceived their parents as favoring appropriate sex-role adoption to a stronger degree than lower SES boys. Also, more upper-middle SES boys manifested preferences for like-sexed playmates. There were no differences between the boys from the two SES groups in sex-role identification. It is suggested that the differential in parental pressures for appropriate sex-role adoption may be the significant variable contributing to

stronger masculine tendencies in upper-middle SES boys.

Since the socioeconomic status differences in sex-role learning were in contrast to theoretical expectations and the preponderance of existing research for both boys and girls, it is possible that pertinent factors in this process have been overlooked or are erroneous. In this respect, however, it is only possible to speculate.⁷ As a point of conjecture, it is conceivable that the evidence from United States studies of child-rearing practices such as those of Sears et al. (1957) and Maas (1951) may not be generalizable to Canadian urban society because of differences between the two cultures. It is also feasible that child-rearing practices have been changing rapidly and conclusions from previous research are no longer applicable.

Bronfenbrenner, writing in 1961, noted then that the distinctions in child-rearing practices between different socioeconomic status groups were quickly vanishing. This trend may be continuing, perhaps as a result of the widespread influence of television and the popularization of parent guide books to child development and behavior. The finding that upper-middle SES boys perceive their parents as favoring appropriate sex-role adoption to a stronger degree than lower SES boys could indicate that permissiveness in child-rearing is now more characteristic of lower socioeconomic status parents than those of middle socioeconomic status.

Relationships Among the Criteria of Sex-Role Learning

There were no correlations between the two measures of sex-role preference for lower SES boys, upper-middle SES boys, lower SES girls, or upper-middle SES girls. This was interpreted as indicating that the ITSC and interrogation with respect to the preferred sex role are not equally valid criteria of sex-role preference. It was suggested that the ITSC is a more valid indication of this variable, but that the use of the "It" figure must still be considered as problematic. Further insight into the use of this stick-figure drawing was provided, however. It was found that the perceived sex of "It" was independent of intelligence for both girls and boys.

Since only two of twelve contingency coefficients computed for the three DAPT indicators of sex-role identification were significant, this would indicate that they measure different behavioral phenomena. The results do not suggest which of the DAPT characteristics is the most valid criterion of sex-role identification.

The number of significant correlations among the tests of sex-role preference, sex-role identification, choice of playmates, and children's perceptions of parental preferences for sex-role adoption was not much greater than would be expected by chance. These results would suggest that the aspects of sex-role learning investigated

may be orthogonal. Alternately, the findings would indicate that further validation research of the measurement procedures used is required.

IMPLICATIONS

1. The emphasis in further sex-role learning research should be on the validation of existing techniques or the development of new measurement procedures. Inconsistencies in previous research and the results obtained in this study both underscore this need. Since children are aware of socially-desirable responses in this area of personality development, projective and observational techniques may best meet the usual measurement criteria.

2. Further correlational or factorial research should be undertaken to establish the degree to which tests of other specific aspects of sex-role learning measure the same variable. For example, it would be useful to determine the relationships between the various criteria of parental identification.

3. In the clinical study of children with personal maladjustments, the measurement techniques utilized in this thesis should be used in diagnosis only as adjuncts to other sources of information.

4. Popular views of what constitutes "suitable" masculine and feminine behavior for children of different

age levels should be determined in view of contemporary sex-role trends. New sex-role learning measurement procedures should take into account the recent changes in sex-role definitions.

5. An extensive research of child-rearing practices in different socioeconomic strata in Canadian society is indicated. Evidence from this study signifies that the results of earlier research in the United States may be neither generalizable nor currently applicable to Canadian society.

BIBLIOGRAPHY

- Adler, A. Understanding Human Nature. New York: Fawcett World Library (Fifth Printing), 1965.
- Bandura, A. and Walters, R. H. Social Learning and Personality Development. New York: Holt-Rinehart, 1963.
- Beier, E. G. and Ratzeburg, F. The parental identification of male and female college students. Journal of Abnormal and Social Psychology, 1953, 48, 569-572.
- Bettelheim, B. The problem of generations. Daedalus: Journal of American Academy of Arts and Sciences, 1963, 91, 68-96.
- Bieliauskas, V. J. Sexual identification in children's drawings of human figure. Journal of Clinical Psychology, 1960, 16, 42-44.
- Blishen, B. R. The construction and use of an occupational class scale. Canadian Journal of Economics and Political Science, 1958, 24, 519-531.
- Blum, G. S. A study of the psychoanalytic theory of psychosexual development. Genetic Psychology Monographs, 1949, 39, 3-99.
- Brodbeck, A. J. Oedipal motivation as a determinant of conscience development. Journal of Genetic Psychology, 1954, 84, 219-227.
- Bronfenbrenner, U. The changing American parent: a speculative analysis. Journal of Social Issues, 1961, 17, 6-18.
- Brown, D. G. Sex-role preference in young children. Psychological Monographs, 1956, 70, No. 14 (Whole No. 421).
- Brown, D. G. Masculinity-femininity development in children. Journal of Consulting Psychology, 1957, 21, 197-202.
- Brown, D. G. Sex-role development in a changing culture. Psychological Bulletin, 1958, 55, 232-242.

BIBLIOGRAPHY

1. Environmental Law Library. The Year. Environmental Law Library. 1971. 1972.
2. Environmental Law Library. The Year. Environmental Law Library. 1971. 1972.
3. Environmental Law Library. The Year. Environmental Law Library. 1971. 1972.
4. Environmental Law Library. The Year. Environmental Law Library. 1971. 1972.
5. Environmental Law Library. The Year. Environmental Law Library. 1971. 1972.
6. Environmental Law Library. The Year. Environmental Law Library. 1971. 1972.
7. Environmental Law Library. The Year. Environmental Law Library. 1971. 1972.
8. Environmental Law Library. The Year. Environmental Law Library. 1971. 1972.
9. Environmental Law Library. The Year. Environmental Law Library. 1971. 1972.
10. Environmental Law Library. The Year. Environmental Law Library. 1971. 1972.
11. Environmental Law Library. The Year. Environmental Law Library. 1971. 1972.
12. Environmental Law Library. The Year. Environmental Law Library. 1971. 1972.
13. Environmental Law Library. The Year. Environmental Law Library. 1971. 1972.
14. Environmental Law Library. The Year. Environmental Law Library. 1971. 1972.
15. Environmental Law Library. The Year. Environmental Law Library. 1971. 1972.
16. Environmental Law Library. The Year. Environmental Law Library. 1971. 1972.
17. Environmental Law Library. The Year. Environmental Law Library. 1971. 1972.
18. Environmental Law Library. The Year. Environmental Law Library. 1971. 1972.
19. Environmental Law Library. The Year. Environmental Law Library. 1971. 1972.
20. Environmental Law Library. The Year. Environmental Law Library. 1971. 1972.

- Brown, D. G. Sex-role preference in children: methodological problems. Psychological Reports, 1962, 11, 477-478.
- Brown, D. G. and Tolor, A. Human figure drawings as indicators of sexual identification and inversion. Perceptual and Motor Skills, 1957, 7, 199-211.
- Butler, R. L. and Marcuse, F. L. Sex identification at different ages using the Draw-A-Person Test. Journal of Projective Techniques, 1959, 23, 299-302.
- Clark, E. T. Sex-role preference in mentally retarded children. American Journal of Mental Deficiency, 1963a, 68, 606-610.
- Clark, E. T. Sex-role preference in mentally retarded females. American Journal of Mental Deficiency, 1963b, 68, 433-439.
- Clausen, J. A. and Williams, Judith R. Sociological correlates of child behavior, in The Sixty-Second Yearbook of the National Society for the Study of Education. Stevenson, H.; Kagan, J.; and Spiker, C., eds. Chicago: University of Chicago Press, 1963.
- Dalke, H. O. Determinants of sociometric relations among children in the elementary school. Sociometry, 1953, 16, 327-338.
- Davis, A. and Havighurst, R. J. Social class and color differences in child rearing. American Sociological Review, 1946, 11, 698-710.
- DeLucia, Lenore A. The Toy Preference Test: a measure of sex-role identification. Child Development, 1963, 34, 107-117.
- Ellis, A. The American Sexual Tragedy. New York: Grove Press, 1962.
- Ellis, H. On Life and Sex. Toronto: The New American Library, 1962.
- Emmerich, W. Parental identification in young children. Genetic Psychology Monographs, 1959a, 60, 257-308.
- Emmerich, W. Young children's discriminations of parent and child roles. Child Development, 1959b, 30, 403-419.

James H. ...
...
...

James H. ...
...
...

James H. ...
...
...

James H. ...
...
...

James H. ...
...
...

James H. ...
...
...

James H. ...
...
...

James H. ...
...
...

James H. ...
...
...

James H. ...
...
...

James H. ...
...
...

James H. ...
...
...

- Farber, S. M. and Wilson, R. H. L. (Symposium Eds.),
Man and Civilization, The Potential of Woman.
New York: McGraw-Hill, 1963.
- Fauls, Lydia B.; and Smith, W. D. Sex-role learning of five-year-olds. Journal of Genetic Psychology, 1956, 89, 105-117.
- Ferguson, G. A. Statistical Analysis in Psychology and Education. New York: McGraw-Hill, 1959.
- Fisher, G. M. Sexual identification in mentally retarded male children and adults. American Journal of Mental Deficiency, 1960, 65, 42-45.
- Frank, L. K. The Conduct of Sex. New York: Grove Press, 1961.
- Freud, Anna. The Ego and the Mechanisms of Defense. New York: International Universities Press, 1946.
- Freud, S. Group Psychology and the Analysis of the Ego. London: The Hogarth Press, 1948.
- Friedan, Betty. The Feminine Mystique. New York: The Dell Publishing Co., 1964.
- Goodenough, E. W. Interest in persons as an aspect of sex difference in the early years. Genetic Psychology Monographs, 1957, 55, 287-323.
- Gray, Susan W., and Klaus, R. The assessment of parental identification. Genetic Psychology Monographs. 1956, 54, 87-114.
- Hall, Marjorie, and Keith, R. Sex-role preference among children of upper and lower social class. Journal of Social Psychology, 1964, 62, 101-110.
- Hartley, Ruth E. Sex role pressures and the socialization of the male child. Psychological Reports, 1959, 5, 457-468.
- Hartley, Ruth E. A developmental view of female sex-role definition and identification. Merrill-Palmer Quarterly, 1964, 10, 3-16.
- Hartup, W. W. Some correlates of parental imitation in young children. Child Development, 1962, 33, 85-96.

- Hartup, W. W. and Zook, Elsie A. Sex-role preference in three-and four-year-olds. Journal of Consulting Psychology, 1960, 24, 420-426.
- Hollingshead, A. and Redlich, F. Social Class and Mental Illness. New York: John Wiley and Sons, 1958.
- Johnson, R. C.; Johnson, Carol; and Martin, L. Authoritarianism, occupation, and sex-role differentiation of parents. Child Development, 1961, 32, 271-276
- Jolles, I. A study of the validity of some hypotheses for the qualitative interpretation of the HPT for children of elementary school age: I. sexual identification. Journal of Clinical Psychology, 1952, 8, 113-118.
- Kagan, J. The child's perception of the parent. Journal of Abnormal and Social Psychology, 1956, 53, 257-258.
- Kagan, J. The concept of identification. Psychological Review, 1958, 65, 296-305.
- Kagan, J. and Lemkin, Judith. The child's differential perception of parental attributes. Journal of Abnormal and Social Psychology, 1960, 61, 440-447.
- Knopf, I. J. and Richards, T. W. The child's differentiation of sex as reflected in drawings of the human figure. Journal of Genetic Psychology, 1952, 81, 99-112.
- Kolberg, L. Moral development and identification, in The Sixty-Second Yearbook of the National Society for the study of Education. Stevenson, H.; Kagan, J.; and Spiker, C., eds. Chicago: University of Chicago Press, 1963.
- Komarovsky, Mirra. Women in the Modern World. Boston: Little, Brown & Co., 1953.
- Lansky, L. M. and McKay, G. Sex-role preferences of kindergarten boys and girls: some contradictory results. Psychological Reports, 1963, 13, 415-421.
- Lazowick, L. W. On the nature of identification. Journal of Abnormal and Social Psychology, 1955, 51, 175-183.

1. The first of these is the fact that the
 Government has been unable to secure
 the necessary funds to carry out its
 policy of non-interference.

2. The second is the fact that the
 Government has been unable to secure
 the necessary funds to carry out its
 policy of non-interference.

3. The third is the fact that the
 Government has been unable to secure
 the necessary funds to carry out its
 policy of non-interference.

4. The fourth is the fact that the
 Government has been unable to secure
 the necessary funds to carry out its
 policy of non-interference.

5. The fifth is the fact that the
 Government has been unable to secure
 the necessary funds to carry out its
 policy of non-interference.

6. The sixth is the fact that the
 Government has been unable to secure
 the necessary funds to carry out its
 policy of non-interference.

7. The seventh is the fact that the
 Government has been unable to secure
 the necessary funds to carry out its
 policy of non-interference.

8. The eighth is the fact that the
 Government has been unable to secure
 the necessary funds to carry out its
 policy of non-interference.

9. The ninth is the fact that the
 Government has been unable to secure
 the necessary funds to carry out its
 policy of non-interference.

10. The tenth is the fact that the
 Government has been unable to secure
 the necessary funds to carry out its
 policy of non-interference.

11. The eleventh is the fact that the
 Government has been unable to secure
 the necessary funds to carry out its
 policy of non-interference.

12. The twelfth is the fact that the
 Government has been unable to secure
 the necessary funds to carry out its
 policy of non-interference.

- Leftkowitz, M. Some relationships between sex-role preference of children and other parent-child variables. Psychological Reports, 1962, 10, 43-53.
- Levin, H. and Sears, R. R. Identification with parents as a determinant of doll-play aggression. Child Development, 1956, 27, 135-155.
- Lynn, D. B. A note on sex differences in masculine and feminine identification. Psychological Review, 1959, 66, 126-135.
- Lynn, D. B. Sex differences in identification development. Sociometry, 1961, 24, 372-383.
- Lynn, D. B. Sex role and parental identification. Child Development, 1962, 33, 555-564.
- Lynn, D. B. Divergent feedback and sex-role identification in boys and men. Merrill-Palmer Quarterly, 1964, 10, 17-24.
- Lynn, D. B. and Sawrey, W. L. The effects of father absence on Norwegian boys and girls. Journal of Abnormal and Social Psychology, 1959, 258-262.
- Maas, H. S. Some social class differences in the family systems and group relations of pre- and early adolescents. Child Development, 1951, 22, 145-152.
- Maccoby, Eleanor E. Role taking in childhood and its consequences for social learning. Child Development, 1959, 30, 239-252.
- Machover, Karen. Personality Projection in the Drawing of the Human Figure. Springfield, Illinois: Thomas, 1949.
- Machover, Karen. Human figure drawings of children. Journal of Projective Techniques, 1953, 17, 85-91.
- McBride, Billie E. J. The Parental Identification of Adolescents. Master's Thesis, University of Alberta, Edmonton, 1961.
- McCandless, B. R. Children and Adolescents. New York: Holt, Rinehart, and Winston, 1961.

- McCandless, B. R. and Hoyt, June M. Sex, ethnicity, and play preferences of preschool children. Journal of Abnormal and Social Psychology, 1961, 62, 683-685.
- Mead, Margaret. Male and Female. New York: The New American Library, 1955.
- Montagu, A. The Natural Superiority of Women. London: Allen and Unwin Ltd., 1954.
- Mowrer, O. H. Learning Theory and Personality Dynamics. New York: The Ronald Press Co., 1950.
- Mussen, P. H. The Psychological Development of the Child. Englewood Cliffs, N. J.: Prentice-Hall Inc., 1963.
- Mussen, P. H.; Conger, J. J.; and Kagan, J. Child Development and Personality, Second Edition. New York: Harper and Row, 1963.
- Mussen, P. H. and Distler, L. Masculinity, identification, and father-son relationships. Journal of Abnormal and Social Psychology, 1959, 59, 350-356.
- Parsons, T. The school class as a social system: some of its functions in American society, in Education, Economy, and Society. Halsey, A. H.; Floud, J.; and Anderson, C. H., eds. New York: The Free Press of Glencoe, 1961.
- Parsons, T. and Bales, R. Family, Socialization, and Interaction Process. Glencoe, Ill.: The Free Press, 1955.
- Rabban, M. Sex-role identification in young children in two diverse social groups. Genetic Psychology Monographs, 1950, 42, 81-158.
- Richey, Marjorie H. Qualitative superiority of the "self" figure in children's drawings. Journal of Clinical Psychology, 1965, 21, 59-61.
- Sears, Pauline S. Child-rearing factors related to playing of sex-typed roles. American Psychologist, 1953, 8, 431.

...the ... of ... and ...
...the ... of ... and ...
...the ... of ... and ...

...the ... of ... and ...
...the ... of ... and ...

...the ... of ... and ...
...the ... of ... and ...

...the ... of ... and ...
...the ... of ... and ...

...the ... of ... and ...
...the ... of ... and ...

...the ... of ... and ...
...the ... of ... and ...

...the ... of ... and ...
...the ... of ... and ...

...the ... of ... and ...
...the ... of ... and ...

...the ... of ... and ...
...the ... of ... and ...

...the ... of ... and ...
...the ... of ... and ...

...the ... of ... and ...
...the ... of ... and ...

...the ... of ... and ...
...the ... of ... and ...

...the ... of ... and ...
...the ... of ... and ...

...the ... of ... and ...
...the ... of ... and ...

...the ... of ... and ...
...the ... of ... and ...

...the ... of ... and ...
...the ... of ... and ...

- Sears, R. R.; Maccoby, Eleanor; and Levin, H. Patterns of Child-Rearing. Evanston, Ill.: Row Peterson and Co., 1957
- Sherriffs, A. C. and Jarrett, R. F. Sex differences in attitudes about sex differences. Journal of Psychology, 1953, 35, 161-168.
- Siegel, S. Nonparametric Statistics. New York: McGraw-Hill, 1956.
- Speroff, B. J. The stability of sociometric choice among kindergarten children. Sociometry. 1955, 18, 129-131.
- Starr, S. and Marcuse, F. L. Reliability in the Draw-A-Person Test. Journal of Projective Techniques, 1959, 23, 83-86.
- Stoke, S. M. An inquiry into the concept of identification. Journal of Genetic Psychology, 1950, 76, 163-189.
- Swensen, C. W. Empirical evaluations of human figure drawings. Psychological Bulletin, 1957, 54, 431-466.
- Swensen, C. W. and Newton, K. R. The development of sexual differentiation on the Draw-A-Person Test. Journal of Clinical Psychology, 1955, 11, 417-419.
- Walker, K. and Fletcher, P. Sex and Society. Baltimore: Penguin Books Inc., 1955.
- Warner, W. L.; Meeker, Marchia; and Eells, K. Social Class in America. New York: Harper, 1960
- Watson, R. I. Psychology of the Child. New York: J. Wiley and Sons, 1961.
- Weidner, A. and Noller, P. Objective studies of children's drawings of human figures: I. sex awareness and socioeconomic level. Journal of Clinical Psychology, 1950, 6, 319-325.
- Weidner, A. and Noller, P. Objective studies of children's drawings of human figures: II. sex, age, and Intelligence. Journal of Clinical Psychology, 1953, 9, 20-23.
- Winer, B. J. Statistical Principles in Experimental Design. New York: McGraw-Hill, 1962.

1. The first of the three main types of the ... is the ...

2. The second of the three main types of the ... is the ...

3. The third of the three main types of the ... is the ...

4. The fourth of the three main types of the ... is the ...

5. The fifth of the three main types of the ... is the ...

6. The sixth of the three main types of the ... is the ...

7. The seventh of the three main types of the ... is the ...

8. The eighth of the three main types of the ... is the ...

9. The ninth of the three main types of the ... is the ...

10. The tenth of the three main types of the ... is the ...

11. The eleventh of the three main types of the ... is the ...

12. The twelfth of the three main types of the ... is the ...

13. The thirteenth of the three main types of the ... is the ...

14. The fourteenth of the three main types of the ... is the ...

APPENDICES

Appendix A

Appendix B

Appendix C

Appendix D

Appendix E

Appendix F

Appendix G

Appendix H

Appendix I

Appendix J

APPENDIX A

INSTRUCTIONS FOR ADMINISTERING THE IT SCALE FOR CHILDREN¹

Introduction

We are going to play a little game with this child here. See the child? Let's call this child "It". Let's play like the name of this child is It, O.K? So this game will be about It. Here, you hold It. Now, we're going to show this child, whose name is It, some cards with pictures on them.

Toy Pictures

(Randomly lay out the 16 toys in four columns of four.) Look, here are some pictures of toys. These are all nice toys, aren't they? Yes. Now, let's play like It could play with all of these toys. Which toy would It like the best? Put It on the toy It likes the best . . . Now put It on another toy it likes. (Repeat until eight choices are made.) Are you having fun playing with It? Fine. Now we have some other pictures we're going to show It.

Eight Paired Pictures

(a) Indians: Here are pictures of Indians. Let's play like It could be an Indian, too. Put It on the Indian that It would rather be. (b) Clothes: Here are pictures of some clothes. Let's play like It could have any clothes It wanted. Put It on the clothes It would rather have. (c) Sewing-Airplane: Here are pictures of things to use in making an airplane and things to use in making a handkerchief. Which would It rather make, an airplane or a handkerchief? Put It on the one It would rather make. (d) Face Articles: Here are pictures of things to use on our face. Now, let's play like It could play "grown-ups" and It had all these things to play "grown-ups" with. Put It on the one It would rather play "grown-ups" with. (e) Mechanical Tools and Household Objects: Here are pictures of some objects of use in fixing things that are broken. Let's play like It had all of these things to work with. Put It on the ones It would rather work with.

¹These instructions are taken from Brown (1956). The directions in brackets and those under the title "Sex Attributed to It," however, are additions.

APPENDIX A (continued)

(f) Shoes: Here are pictures of some shoes. Now let's play like It could "dress up" and "play house." Put It on the shoes that It would rather "play house" with.

(g) Children Playing: Here are some pictures of children playing together. Let's play like It could be in one of these pictures, too. Put It on the picture It would rather be in. (h) Building Tools and Baking Articles: Here are pictures of things to work with. Let's play like "It" could work with all of these things. Put It on the things It would rather work with.

Four Child-Figures

Here are some pictures of children. Let's play like It could be any one of these It wanted to be. Put It on the one It would rather be.

Sex Attributed to "It"

Now would you like to give It a name? (If S's response does not clearly imply the sex, ask if "It" is a boy or a girl.)

...with ... the ... of ...
 ... the ... of ...
 ... the ... of ...
 ... the ... of ...
 ... the ... of ...
 ... the ... of ...
 ... the ... of ...
 ... the ... of ...
 ... the ... of ...
 ... the ... of ...

Appendix A

... the ... of ...
 ... the ... of ...
 ... the ... of ...
 ... the ... of ...

Appendix B

... the ... of ...
 ... the ... of ...
 ... the ... of ...
 ... the ... of ...

APPENDIX B

IT SCALE FOR CHILDREN SCORE SHEET

Name _____ Sex _____ School _____

Test Administered 1st 2nd 3rd

Order of Administration of Sections (check)

1st	2nd	3rd	
Toys	Child Figures	Paired Pictures	_____
Toys	Paired Pictures	Child Figures	_____
Paired Pictures	Toys	Child Figures	_____
Paired Pictures	Child Figures	Toys	_____
Child Figures	Toys	Paired Pictures	_____
Child Figures	Paired Pictures	Toys	_____

Check the choices the subject actually makes. To facilitate scoring, male items appear on the left, female on the right.

Toy Pictures--Record by putting 1 after S's first choice, 2 after second, and so on.

			<u>Score</u>
Dump Truck	_____	Baby bath	_____
Earthmover	_____	Cradle	_____
Gun	_____	Dishes	_____
Knife	_____	Doll	_____
Racer	_____	Doll buggy	_____
Soldiers	_____	High chair	_____
Tractor	_____	Necklace	_____
Train Engine	_____	Purse	_____

Paired Pictures

Indian Chief	_____	Indian Princess	_____
Trousers and shirt	_____	Dress	_____
Airplane parts	_____	Sewing articles	_____
Shaving articles	_____	Cosmetic articles	_____
Mechanical tools	_____	Household objects	_____
Men's shoes	_____	Women's shoes	_____
Boys playing	_____	Girls playing	_____
Building tools	_____	Baking tools	_____

Child Figures Section

Boy	_____	Girl	_____
Girlish Boy	_____	Boyish Girl	_____

Sex Attributed to It

Total Score _____

Male _____

Female _____

APPENDIX C

INSTRUCTIONS FOR THE DOLL PLAY INTERROGATION¹Preferred Sex Role

Randomly place the boy and girl cardboard dolls before the subject and pointing to each in turn say, "Let's make believe that this is a real boy and this is a real girl. Pretend you could be one of these children. Which would you rather be?" Record the subject's response and take the dolls away.

Choice of Playmates

Again randomly place the two dolls before the subject and say, "Now, I would like you to imagine again that these are real children. This time I want you to show me which of the two children you would rather play with." Record the subject's response.

¹These instructions, as well as the procedure, were devised for this study.

APPENDIX D

DIRECTIONS FOR ADMINISTERING THE DRAW-A-PERSON TEST¹

Place an 8½" x 11" sheet of drawing paper in an upright position before the subject and hand him/her a black crayon. Say, "Here is a sheet of paper and a crayon. Would you like a person for me? You may draw a person any way you want to." If the subject offers only a head, turn the paper over and ask him/her to make "a whole person".

If the subject is resistant say, "I am not interested in how well you draw, I just want to know how you try to make a person." Subject's questions are to be answered in a pleasant but evasive manner: "You may do it any way you like." "Do whatever you think best."

While a subject is drawing the first person he/she may spontaneously tell who it is. In this case record the sex of the first drawn figure. If the subject has not spontaneously identified the person drawn by sex and level of maturity when he/she is finished say, "Tell me about the picture." If in response the sex and level of maturity is not indicated say, "Who is it?"

Take the first drawing away and conceal it so that it cannot be used as a model for the second. Give the subject another sheet of drawing paper in an upright position and according to the sex and level of maturity of the first drawn figure say, "You drew a man/lady/boy, and so on. Now would you like to draw a lady/man/girl, and so on? Let me know when you are finished."

¹The original Draw-A-Person Test directions and procedure were adapted for this study.

APPENDIX E

INSTRUCTIONS FOR RATING THE DRAW-A-PERSON TEST HUMAN
FIGURE DRAWINGS FOR SEXUAL DIFFERENTIATION

You are requested to examine and rate for sexual differentiation 100 pairs of human figure drawings of Grade I students. For your information each of the subjects was administered the Draw-A-Person Test in which the subject is first requested to "draw a person" and subsequently is asked to draw a figure of the same level of maturity as the first drawn, but of the opposite sex. Hence, each pair of pictures represents a masculine and feminine drawing by one subject.

The rating you are asked to make is with respect to the prevalence of sexual differentiation between the two drawings. Examine each pair of pictures carefully, noting the following:

1. Physical features, for example, hair.
2. Clothing and dress, for example, hats, dress, pants.
3. Accessories and details, for example, pipe, earrings, purse.
4. Activity, or anything else present to help distinguish the sexes of the drawings.

Considering the differentiation between the two drawings in the objective properties, if in your opinion, both drawings appear sexually neutral, (cannot tell from the properties whether either is male or female), or both drawings appear to be male or female, score the set as undifferentiated. If, however, one drawing appears to be sexually neutral and the other can be distinguished as male or female, or one drawing indicates a male figure and the other a female figure, score the set as differentiated.

You are in no way restricted as to the number of sets you may score in either of the two categories.

APPENDIX F

DRAW-A-PERSON TEST SCORE SHEET

Name _____ Sex _____ School _____

Test Administered 1st 2nd 3rd

Sex of the first drawn figure _____

Sex of the larger drawn figure _____

Sexual differentiation _____

APPENDIX G

DIRECTIONS FOR ADMINISTERING THE MODIFICATION OF
THE TOY PREFERENCE TEST¹

"Now I have a/another game I think you will like to play. Here is a boy/girl doll and here is the mother/father." Place the two cardboard dolls flat on the table before the subject but leaving room immediately in front of him/her for the toy preference cards. The doll of the same sex as the subject is to be used. The parent doll to be introduced first for each subject is indicated on the Testing Instruction Sheets.

"We are going to show the mother/father and the boy/girl some toys." Present Sample Card A and say, "Here are the first ones." Read the names of the toys as they appear on the backs of the cards from the subject's left to right. In this case say, "This is a toy fishing pole and this is a toy washing machine. Which does the mother/father want the boy/girl to play with?" Administer Sample B and Sample C and proceed through cards one to twenty-four. Be sure to read the names of the toys from the subject's left to right and to record his/her responses.

When all the cards have been presented once, take the parent doll used in the above way and introduce the other parent doll by saying, "Now, let's play the game this way. This is the boy's/girl's mother/father. Now we'll show the toys to the father/mother and the boy/girl. Maybe the father/mother will want the boy/girl to play with the same toys as the mother/father or maybe different ones. Just show me which you think the mother/father would want the boy/girl to play with." Administer cards one to twenty-four again using the same directions as before. Be sure to record the subject's responses.

¹The procedure and directions were adapted from DeLucia (1963).

APPENDIX H

SCORE SHEET FOR THE MODIFIED VERSION OF THE TOY PREFERENCE TEST

Name _____ Sex _____ School _____

Test Administered 1st 2nd 3rd

Which parent was subject asked to choose for first? _____

Indicate respectively by M and F the Mother's and Father's choices of toys. To facilitate scoring, the more masculine toys appear in capital letters.

1. wheelbarrow	_____	_____	ERECTOR SET	_____	_____
2. cleaning set	_____	_____	TELEPHONE	_____	_____
3. PLANE	_____	_____	racing car	_____	_____
4. convertible	_____	_____	FOOTBALL	_____	_____
5. TEDDY BEAR	_____	_____	jump rope	_____	_____
6. rocking horse	_____	_____	TRACTOR	_____	_____
7. jump rope	_____	_____	ALPHABET BALL	_____	_____
8. blackboard	_____	_____	WHEEL BARROW	_____	_____
9. DISH CABINET	_____	_____	doll wardrobe	_____	_____
10. FOOTBALL	_____	_____	dump truck	_____	_____
11. ERECTOR SET	_____	_____	blackboard	_____	_____
12. TOOL SET	_____	_____	rocking horse	_____	_____
13. sewing machine	_____	_____	WADING POOL	_____	_____
14. DUMP TRUCK	_____	_____	convertible	_____	_____
15. banjo	_____	_____	PLANE	_____	_____
16. cosmetics	_____	_____	CLEANING SET	_____	_____
17. doll buggy	_____	_____	SEWING MACHINE	_____	_____
18. TELEPHONE	_____	_____	cosmetics	_____	_____
19. RACING CAR	_____	_____	banjo	_____	_____
20. ALPHABET BALL	_____	_____	teddy bear	_____	_____
21. ROLLER SKATES	_____	_____	dish cabinet	_____	_____
22. WADING POOL	_____	_____	doll buggy	_____	_____
23. tractor	_____	_____	TOOL SET	_____	_____
24. doll wardrobe	_____	_____	ROLLER SKATES	_____	_____

Mother's Score _____

Father's Score _____

Total Score _____

APPENDIX I
TESTING INSTRUCTION SHEET

School _____

Sex _____

Name	Room	Give the Tests in This Order	Order of Administ- ering 3 Sections	ITSC Paired Pic- tures Begin With	TPT Introduce First	Date Tested
<u>EXAMPLE</u>						
Billy Rose	23	1.DAPT 2.ITSC 3.Doll Play 4.TPT	1.Toys 2.Child Figures 3.Paired Pictures	Envel- ope 7	Mother Doll	Nov.25, 1964.

APPENDIX J

TABLES OF RAW SCORES

(KEY TO TABLES)

<u>Column Number</u>	<u>Column Headings</u>
1	Identification Number
2	TPT Scores
3	Sexual Differentiation on the DAPT D-Differentiated U-undifferentiated
4	Sex of First Drawn Figure on the DAPT M-Male F-Female
5	Sex of Larger Drawn Figure on the DAPT M-Male F-Female
6	ITSC Scores
7	Sex Attributed to "It" Figure M-Male F-Female
8	Preferred Sex Role (Doll Play) M-Male F-Female
9	Playmate Preference (Doll Play) M-Male F-Female

RAW SCORES FOR UPPER-MIDDLE SOCIOECONOMIC STATUS BOYS

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	32	D	M	F	84	M	M	M
2	25	D	M	F	84	M	M	F
3	34	D	F	F	68	F	M	F
4	35	D	F	M	84	M	M	F
5	32	D	F	M	84	M	M	M
6	37	D	M	F	84	M	M	M
7	36	D	F	F	76	M	M	F
8	27	D	M	F	84	M	M	M
9	38	D	M	M	84	M	M	M
10	34	D	M	F	84	M	M	M
11	37	D	F	F	43	M	M	M
12	30	D	F	M	76	M	M	M
13	32	D	M	M	84	M	M	M
14	35	D	F	F	84	M	M	M
15	39	D	F	M	84	M	M	M
16	39	D	M	M	84	M	M	M
17	26	U	M	F	63	M	M	M
18	30	D	M	F	84	M	M	M
19	37	D	M	M	8	M	M	M
20	27	U	M	F	84	M	M	M
21	30	U	M	M	84	M	M	M
22	37	U	M	F	84	M	M	M
23	26	U	M	M	84	F	M	M
24	39	D	F	F	82	M	M	M
25	38	D	F	F	84	M	M	M

RAW SCORES FOR LOWER SOCIOECONOMIC STATUS BOYS

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	25	D	M	M	74	M	M	F
2	25	D	M	F	84	M	M	F
3	26	D	M	F	84	M	M	M
4	27	D	M	M	76	M	M	M
5	33	D	M	F	84	M	M	F
6	26	D	F	F	76	M	M	F
7	21	D	M	F	72	M	M	M
8	35	D	M	F	84	M	M	M
9	29	U	M	M	20	F	M	M
10	32	D	M	F	84	M	M	M
11	33	D	M	F	76	M	M	M
12	31	D	M	F	76	M	M	M
13	37	D	M	F	84	M	M	F
14	28	D	M	F	76	M	M	F
15	34	U	M	F	68	M	M	M
16	28	U	M	F	66	M	M	M
17	25	D	M	M	84	M	M	M
18	28	D	M	M	68	M	M	M
19	27	D	F	M	58	M	M	F
20	32	D	F	M	76	M	M	M
21	27	D	F	F	71	M	M	F
22	34	D	F	M	17	F	M	M
23	20	U	M	F	84	M	M	M
24	34	D	F	M	84	M	M	F
25	28	D	M	F	82	M	M	F

RAW SCORES FOR UPPER-MIDDLE SOCIOECONOMIC STATUS GIRLS

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	35	D	M	M	56	F	F	M
2	36	D	F	F	0	M	F	F
3	30	D	M	M	1	M	F	F
4	31	D	F	F	8	M	F	M
5	18	D	F	F	0	M	F	F
6	35	D	F	F	8	M	F	F
7	27	D	M	M	66	M	F	F
8	30	D	F	M	1	M	F	F
9	26	U	F	F	76	F	F	F
10	32	D	F	F	13	M	F	F
11	27	D	F	M	22	M	F	M
12	27	D	F	F	8	M	F	M
13	29	D	F	F	84	F	F	M
14	36	D	F	F	0	M	F	F
15	23	D	F	F	29	M	F	F
16	39	D	F	M	8	M	F	F
17	31	D	M	M	12	F	F	F
18	29	D	M	F	0	M	F	M
19	26	D	F	F	12	M	F	F
20	23	D	F	F	0	M	F	F
21	23	D	F	F	64	F	F	M
22	33	D	F	F	0	M	F	F
23	26	D	F	M	84	F	F	F
24	25	D	F	F	58	M	F	F
25	32	D	F	F	0	M	F	F

RAW SCORES FOR LOWER SOCIOECONOMIC STATUS GIRLS

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	28	D	M	F	61	M	F	M
2	28	D	F	F	0	M	F	F
3	33	D	F	F	0	M	F	F
4	28	D	F	F	24	M	F	F
5	32	D	F	F	0	M	F	F
6	32	U	F	F	15	M	F	M
7	29	U	F	M	71	F	F	M
8	23	D	F	M	12	M	F	M
9	23	D	F	M	34	M	F	F
10	30	D	F	M	8	M	F	F
11	26	D	F	F	73	M	F	M
12	22	D	F	F	0	M	F	M
13	30	D	F	F	0	M	F	M
14	36	D	F	F	0	M	F	F
15	33	D	M	M	45	M	F	F
16	33	D	F	M	0	M	F	M
17	29	D	F	F	83	F	F	F
18	28	U	F	F	83	F	F	F
19	26	D	F	F	83	F	F	M
20	24	U	F	M	5	M	F	M
21	29	D	M	M	46	F	F	F
22	33	D	F	M	1	M	F	M
23	27	D	F	F	26	M	F	M
24	24	D	F	F	1	M	F	F
25	30	D	F	M	72	F	F	F

University of Alberta Library



0 1620 1096 7972

B29855